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AN INTERPRETATION OF CHINA

By L. Y. Ho,
University of Pennsylvania.

After unpleasant experiences with the external world for over half a century, the knock of the Western Powers has at last been heard in China. To-day the old Dragon has awakened from her constitutional drowsiness and habitual isolation, and is ready and eager to play her part in the world drama. She has come to the world, or more correctly, the world has gone to her. No shirking on either side, each has to meet the other squarely face to face. China, as a nation, must either rise or fall forever. Whichever way it may turn out, she is going to exert a world-wide influence upon future history and affect the course of modern civilization. Viewed from the commercial and political standpoint, China is indeed a tremendously important and interesting problem—a problem looming larger and larger on the horizon of the world's consciousness, and engaging more and more its attention and thought.

More and more attempts are being made to study the country. More travelers now penetrate into that still mysterious land, and more scientists make researches and investigations—merely to increase the world's stock of human knowledge. Last but not least in importance are the press comments which appear frequently in periodicals or dailies. But as the writers have been other than Chinese, the situation is often viewed from a different angle. I attempt here to assume the task of treating the subject from an impartial viewpoint as comprehended by a Chinese student.

China is a typical example of arrested development. A contemporary of Egypt, Babylon, and Assyria, she is accredited to have a history of 5000 years. Her inventions and discoveries like the mariner's compass, block printing, and gunpowder were known respectively as early as the twenty-seventh, fourth century, B.C., and the third century A.D. The institutions of laws, marriage and other customs now extant were firmly established about 1000 B.C. Her greatest minds like Laotze, Confucius and Mencius were

produced 300 B.C. In a word, the monuments of Chinese civilization antedate the Christian era. Since that time, a period of over 2000 years has elapsed, and China has produced no minds comparable to the ancient trio, and for over fifteen centuries has made no new inventions worth speaking of. Up to a comparatively recent date, no change in her ideals and institutions, political, social, ethical, and educational, had taken place. Then all of a sudden, after 2000 years, she evinced signs of change. China has presented three distinctive periods: an attempt is here made to study each period and to offer an explanation of the phenomena of each.

I. Period of Progress

Roughly speaking, this period extended from the creation to the beginning of the Christian era. Like any other nation, China began with a tribe in the province of Shansi. Surrounded by naturally hostile tribes, conflicts between the Chinese and the aborigines followed, and the former, on account of their superiority in strength, survived. By conquest, China gained more territory and population; by intermarriage and assimilation, her blood became enriched, her ideals and institutions became broadened and strengthened. As long as there were hostile tribes around the Chinese, constant conflicts arose. In order to survive, efficiency had to be kept up or increased. With conquests, the nation grew in territory, population, organization, civilization, and ambition. The more she conquered, the more she wanted to conquer until there was nothing more for her to conquer, or she was stopped by some insurmountable barrier. By this time, her intellect and civilization came to a standstill. The career of China's formative conquest came to a close about 220 B.C. The country was then bounded by Chili on the north, Kwangtung on the south, the Pacific Ocean on the east, and Thibet on the west. Feudalism, the cause of her activity and progress, now gave place to absolute monarchy. She settled down with no further motive to strive. She built a great wall on the north, reorganized the country into provinces under thirty satraps, burned all the books, melted all weapons, and exterminated all the daring scholars. The Emperor had come to reign unto eternity; the people and the country were his property. The formation of the country was now complete, and this leads to the second period.

II. Period of Stagnation

This lasted from the beginning of the Christian era to 1840 A.D. It may be called a period of fluctuating stagnation. Since that historic Emperor who dreamed of reigning forever, eighteen different dynasties have followed each other. With every dynastic change, there was always more or less commotion and change in the laws and methods of government, but such commotion was always short in duration and internal in character, and such changes were changes of mere form, not of spirit and substance. When the history of the last two thousand years was summed up, China was not a bit more advanced in her ideals, arts, and institutions than she was at the beginning of the Christian era. In fact, had it not been for the little exercise of her national spirit she had every century, her energy and life would have long ago ebbed away. As it was, signs of backwardness and primitiveness were to be detected everywhere. Naturally, the question that arises is what were the underlying causes. Were there not the Tartars about 100 B.C. on the north, the Thibetans on the west, the Japanese on the east, and the Indo-Chinese on the south with whom the Chinese could contend? Right here we discover the cause of stagnation. The Tartars became amalgamated with the Chinese about the third century A.D. They adopted the Chinese civilization, and with them Mongolia came into the possession of China. Thibet was a region too mountainous; the Thibetans were in a low state of civilization, and their Dalai-lamas readily acknowledged Chinese sovereignty. The same applied to Anam, Siam, and Burmah, with the exception that these were level countries. On the east, the Koreans were reduced to a tributary nation, and as for the Japanese, they were separated from the mainland by a then impassable sea. There being no strong motive for a conflict, the Chinese, except for the expedition of Kublai Khan, never attempted to cross the sea and match strength with that people. Since the Tartars taught nothing to the Chinese, and since the Thibetans and the Indo-Chinese learned from the Chinese, what could or would elevated China learn? Furthermore, by this time, the nation had forgotten the causes of her early progress, and the people were thinking that they alone were the anointed people to remain supreme on earth. Under such circumstances, would they stoop to learn from inferior civilizations? Since China did not get anything, was not

the presence of these less civilized peoples around her tantamount to the absence of a rival or competitor? What could then be more logical as an outcome of the situation than the exaltation and maintenance by the Chinese of their own civilization leading to stagnation and the cessation of all progress?

The courses of the first and second historic periods have been briefly traced. Putting the matter into a nutshell, it was tribal assimilation and intercommunication that formed the nation, and later it was national isolation that arrested its development. In general, the effects of isolation are known; in detail, they are not. Narrowing down the consideration of its effects to those which act within the nation, it is sad to note how disastrous they have been to China. If we survey the forces operating in Chinese civilization, the whole is centered about Confucianism, the embodiment of all early Chinese culture. Like all other systems of philosophy, it has its strong points as well as its weak ones. It was Confucianism that made China; it was the overdoing of Confucianism that was the unmaking of China. The overdoing of Confucianism to which is traceable some of the major evils in Chinese civilization will be discussed here under three headings:

1. *Intellectual Backwardness.*—Confucianism advocates the superiority of antiquity. From that follows the corollary: "Love thy parents and reverence the Emperor." As the emperor is the head of heads, loyalty to the emperor precedes filial devotion to parents. The emperor being absolute over his subjects as the father over his children, it became his interest to inculcate unquestioning obedience in his subjects. According to the old conception of government, the best way of bringing this about was ignorance. So the emperor, who like the famous French monarch identified himself with the state, took no steps whatever to promote the intelligence of the people. On the other hand, he did everything he could to enthrall their intellect and eradicate their intelligence, as was shown by the holocaust made of liberalizing books, the killing of daring thinkers, the institution of the "eight-legged" essay, the encouragement of civil officials, and the contempt for military men. It was the interest of the state to preserve its traditions and to strengthen their sanctions. So the people, as the ruled, had no genuine encouragement from the state. Under such circumstances, no national compulsory education existed, and not many

went to school. But those who went in the face of so many restrictions and stumbling-blocks did not get an intelligent education. Moreover, being a more or less primitive country, in which hardly anything was very much developed, travelling was very difficult and dangerous. In consequence, little travelling was done. Everybody stayed at home and not many ventured out of the town. Few indeed went out of the province, and then only on an official errand or to seek a living. Most of those who could afford to study learned from their fathers or the class of hereditary teachers, while those who could not worked as their fathers did. Thus the scholar remained the scholar; the laborer, the laborer. In the scholar's family, the father taught the son, the son the grandson, and so on for centuries. In the laborer's family, the father handed down whatever experience he had accumulated in a lifetime to the son, the son to the grandson, and so on, always the same stock of ideas and experiences. What could be the result of such a process? In both classes, there was no broadening of the intellect, but a deepening of prejudices. In fact, education was more and more lifeless and narrow, the scholars became more and more bigoted and self-sufficient, and the intelligence of the people fell lower and lower. This was why China has not been able to produce a world mind, or an immortal book, or an epoch-making invention for the last twenty centuries.

2. *Economic Poverty*.—To understand why China had so few traders to follow the pursuit of domestic or foreign trade, we must go back to the family, the unit of the Chinese society. The keynote of the Chinese family is "Love thy Parents," one of the Confucian commandments. It is the imperative duty of the children to make the parents happy and allow no semblance of sorrow ever to cross their path. In order to see that they are happy, they have to be at home. The unenlightened parents, having nothing better to occupy their minds, indulged themselves in an intense craving to see grandchildren about them. Accordingly, they married their children early when the contracting parties hardly understood what matrimony was, much less the responsibilities therein involved. The outcome was the reckless production of weak offspring. The young husbands not knowing anything of the world, in many cases, still in school, had to fall back on their parents for support—not infrequently permanent support. These

same ignorant parents not satisfied with seeing the marriage of one generation and its offspring generally proceeded to marry their grandchildren as fast as they could grow, or as long as there was a cent in their leaking purse, or a chance to borrow, in order that they might be fructified and be sure before their death that the family worship would be carried on. Two things resulted from this unconditional obedience to parents: (a) Weak, helpless children were born to replenish the nation, to whom life could not but be a burden; (b) ever expanding families living on an ever contracting purse could not but impoverish the nation. In such a suffocating atmosphere, how could trade thrive? Who would be willing to absent himself from his home, if he could not afford to be away? This explains why China is so populous, and feeble, and poor.

3. *Political Disorganization.*—Because of their complete isolation, and the absence of an adventurous spirit, the inhabitants became self-sufficient; their language and dialects, customs, institutions, and ideals stereotyped; their views intolerant; and their sympathies narrow. In a word, each village was a nation unto itself, and China was a nation composed of a myriad of nations with a myriad of dialects and sympathies, disunited and disintegrating. When a nation is composed of a myriad of units, each speaking a different dialect, and having for its beliefs and views only those sanctioned by the past, how can these units understand, sympathize with, help and join with each other in a common patriotism? This was the cause why China was so backward, conservative and helpless. Such is the result of the overdoing of Confucianism, which brought about national disorganization and isolation.

III. Period of Change

The third period is one of national change, a period of transformation. With the introduction of the facilities of communication, a new epoch has been ushered into China. By means of the steamer, the hitherto impassable ocean is now as it were spanned and every part of the world is made accessible to intercourse and investigation. By means of the telegraph news can be flashed from continent to continent in no time. It was these two things that connected China with the outside world, and with their advent, China entered upon a new chapter of her history. Among the things which the steamer and the telegraph made possible are:

1. *International Commerce*.—China had little trade with the world till the middle of the last century, from which time its international commerce may be said to date. With the coming of merchants for the first time in many centuries, our own business men encountered new ideals, new methods, and new practices. To be able to accommodate themselves to each other, they found they had to deviate from the time-honored methods and make the necessary re-arrangements. Although China has been exploited financially, it must be said, however, that she has not been altogether without benefit therefrom. The utter inadequacy of her traditional methods has been exposed, the obsolescence of her antiquated ideals and practices shown up. Further, it has been found that business relations needed to be readjusted and modern commercial laws to be put into operation. What is of the greatest value, it seems, is the broadening of the mental horizon, at the same time accompanied by a new conception of modern business, a new conception of China, and a new conception of the world at large. In short, leaving out of account all the evil consequences, international commerce has done two distinct services: (a) The showing up of the utter inadequacy of existing business methods; (b) the creation of an earnest desire in the mind of the people to know. But its influence is slow and indirect to arouse a nation which has been dreaming for centuries.

2. *International Conflict*.—This factor is very powerful, and has done more to sting the nation to a sense of its corporate consciousness than anything else except modern education, which works rather slowly. Since 1840, China has directly engaged in five wars, and indirectly in one. In 1840, she waged the First Opium war with England, leaving Canton City to bear the brunt of the fight. In 1857, she fought England and France in Chili, which resulted in the sacking of Peking. In 1884, she had a little tussle with France in Tonquin. In 1894, she measured swords with Japan in Korea, because of differences concerning the Hermit Kingdom and Manchuria. In 1900, she struggled with eleven modern Powers, supported by the northern section of the empire. In 1904, the Russo-Japanese war woke up the whole nation. Needless to say, China was no match for the world, but it is interesting to note that the first conflict China had was that of a city against a nation; the second conflict, a province against two nations; the

third conflict, a protectorate against a nation; the fourth conflict, a protectorate and a section against a rising nation; the fifth conflict, half the nation against eleven nations; and in the last conflict, the whole nation viewed the struggle with unutterable anguish and inexpressible mortification. In all these conflicts, there was a progressive awakening. All these war-quakes were really tectonic in character. China had been too much intoxicated with her dreams, and these hard knocks brought her back to her sober senses—to sane thinking and sound judgment.

3. *The Missionary Movement.*—Of this, the soul is, of course, the missionary. As a factor in opening up the country, he has been both beneficial and detrimental. Directly, he is an evangelist, a social reformer, and an educator; indirectly, he is a political factor. As an evangelist, he has broken the spell under which Buddhism and Taoism had held China captive; as a social reformer, he has counteracted the baneful influences of the opium drug which came into the land through international commerce, and also crusaded against the cruel practices of bandaging the foot; as an educational worker, perhaps, he has done his greatest service. He opened the first modern schools in the country; he was the first to introduce modern teaching, he was the first translator of modern books, and lastly the first editor of periodicals, though these, at first, were, of course, of a strictly religious nature. To him must be given the credit for the opening of modern schools in China. But as a political factor, the missionary has often been a curse, causing China loss of territory, life and money, and endangering her sovereignty and even her existence. Such results have done more to hinder than to forward the cause of Christianity in China.

4. *Modern Education.*—The first impetus modern education received in China dates back to the middle of the nineteenth century. The first batch of one hundred and twenty students was sent to America in the early seventies. Later, there was a setback, a reaction against modern education. The craving for education did not really begin till after 1900 when the literati of the country started the exodus to Japan to secure modern training. In 1906, Tokio was literally swamped with Chinese scholars, numbering some 16,000, but now the number is considerably reduced. Most of those who discontinued their studies in Japan found edu-

educational facilities at home which had sprung up in the meantime, while others have gone to Europe and America to seek knowledge at its fountain head. There are about four hundred students in Europe and six hundred in this country. In addition to sending students abroad, an extensive system of schools is being put into effect, and the Board of Education has been created to take charge of the matter.

Aside from schools, there is at present a very active press which furnishes dailies and other periodicals, and discusses all topics, ranging from fiction to all branches of science and religion. The circulation is large, and the average student is always thirsting for news. Besides, thousands of books have been translated, largely from the Japanese. Most of these will have only an ephemeral existence.

After the school and the press come a great many local clubs for the discussion of local government, constitutional government, the family, the school, and so on. Then there are public lecture halls, reading rooms, libraries, and exhibition buildings, though as yet not many of them exist. All these institutions are doubtless very primitive and cannot be expected to come up to the standard of more enlightened countries, but the significant feature of the matter is that modern educational ideals have taken such a firm hold.

To complete the list, mention might be made of the railroad, the steamship, the telegraph, the postal service, the rise of industries, the use of the Kuan Wha (mandarin dialect), the opening of deliberative assemblies, the deep interest in political affairs—these and a hundred others. They are powerful as factors of change. When once called into existence, the rapid changes they make in conditions are to be grasped only by the most imaginative minds. In summing them up, we may say that the primary and secondary factors are but the different forms of the communication, and interchange of ideas.

A word might be added in conclusion. The history of China has worked out exactly as would naturally be expected, and has been a typical example to show the results of isolation for centuries, and more recently of the revivifying effects of communication with the rest of the world. Her early progress was due to the necessity of struggling with her neighbors, her intermediate period

of stagnation to the fact that she had eliminated, by conquest and assimilation, every rival worthy of consideration, and her present awakening to the new forces brought to bear upon her. She moved slowly at first in the path of change, because she had the inertia of twenty centuries. She moves quickly now, because she has overcome that inertia and gained in momentum. Whether the present radical change is leading toward the haven of salvation or the port of destruction, it is too early to predict. But one thing is sure: if the change means a resurrection, it is forever; if it presages a fall, it is a fall forever. The fate of the world hangs upon the future of China.

THE CHINESE REVOLUTION

BY TAI-CHI QUO, B.S.,
University of Pennsylvania.

The entire civilized world, as well as China, is to be heartily congratulated upon the glorious revolution which has been sweeping over that vast ancient empire during the last three months, and which is now practically assured of success. "Just as conflagrations light up the whole city," says Victor Hugo, "revolutions light up the whole human race." Of no revolution recorded in the world's history can this be said with a greater degree of truth than of the present revolution in China. It spells the overthrow of monarchy, which has existed there for over forty centuries, and the downfall of a dynasty which has been the enemy of human progress for the last two hundred and seventy years. It effects the recognition and establishment of personal liberty, the sovereignty of man over himself, for four hundred and thirty-two million souls, one-third of the world's total population.

The Chinese revolution marks, in short, a great, decisive step in the onward march of human progress. It benefits not only China, but the whole world, for just as a given society should measure its prosperity not by the welfare of a group of individuals, but by the welfare of the entire community, so must humanity estimate its progress according to the well-being of the whole human race. Society cannot be considered to be in a far advanced stage of civilization if one-third of the globe's inhabitants are suffering under the oppression and tyranny of a one-man rule. Democracy cannot be said to exist if a great portion of the people on the earth have not even political freedom. Real democracy exists only when all men are free and equal. Hence, any movement which brings about the recognition and establishment of personal liberty for one-third of the members of the human family, as the Chinese revolution is doing, may well be pronounced to be beneficial to mankind.

But¹ is it really true and credible that conservative, slumbering

¹ Strange as it may seem, this doubt is entertained even by many intelligent and well-informed persons. A noted Japanese educator, author and statesman, in a formal address before the Contemporary Club in Philadelphia last December, refused to dignify the present movement in China with the term "revolution," and called it "merely a disturbance."

and "mysterious" China is actually having a revolution, that beautiful and terrible thing, that angel in the garb of a monster? If it is, what is the cause of the revolution? What will be its ultimate outcome? What will follow its success? Will a republic be established and will it work successfully? These and many other questions pertaining to the Chinese situation have been asked, not only by skeptics, but also by persons interested in China and human progress.

It is the purpose of this article merely to discuss, from the viewpoint of enlightened, educated Chinese, these various questions, some of which are too stupendous for the author to answer without posing as a prophet.

There can be no doubt that China is in earnest about what she is doing. Even the skeptics who called the revolution a "mob movement," or another "Boxer uprising," at its early stage must now admit the truth of the matter. The admirable order and discipline which have characterized its proceedings conclusively prove that the revolution is a well-organized movement, directed by men of ability, intelligence and humanitarian principles. Sacredness of life and its rights, for which they are fighting, have generally guided the conduct of the rebels. The mob element has been conspicuous by its absence from their ranks. It is very doubtful whether a revolution involving such an immense territory and so many millions of people as are involved in this one could be effected with less bloodshed than has thus far marked the Chinese revolution. If some allowance be made for exaggeration in the newspaper reports of the loss of lives and of the disorders that have occurred during the struggle, allowance which is always permissible and even wise for one to make, there has been very little unnecessary bloodshed committed by the revolutionists.

Although anti-Manchu spirit was a prominent factor in bringing about the uprising, it has been subordinated by the larger idea of humanity. With the exception of a few instances of unnecessary destruction of Manchu lives at the beginning of the outbreak, members of that tribe have been shown great clemency. The rebel leaders have impressed upon the minds of their followers that their first duty is to respect life and property, and have summarily punished those having any inclination to loot or kill. Despite the numerous outrages and acts of brutality by the Manchus and

imperial troops, the revolutionaries have been moderate, lenient and humane in their treatment of their prisoners and enemies. Unnecessary bloodshed has been avoided by them as much as possible. As Dr. Wu Ting-fang has said: "The most glorious page of China's history is being written with a bloodless pen."

Regarding the cause of the revolution, it must be noted that the revolt was not a sudden, sporadic movement, nor the result of any single event. It is the outcome of a long series of events, the culmination of the friction and contact with the Western world in the last half century, especially the last thirty years, and of the importation of Western ideas and methods into China by her foreign-educated students and other agents.

During the last decade, especially the last five years, there has been a most wonderful awakening among the people in the empire. One could almost see the growth of national consciousness, so rapidly has it developed. When the people fully realized their shortcomings and their country's deplorable weakness as it has been constantly brought out in her dealings with foreign powers, they fell into a state of dissatisfaction and profound unrest. Filled with the shame of national disgrace, and imbued with democratic ideas, they have been crying for a strong and liberal government, but their pleas and protests have been in most cases ignored and in a few cases responded to with half-hearted superficial reforms which are far from satisfactory to the progressives. The Manchu government has followed its traditional *laissez faire* policy in the face of foreign aggressions and threatening dangers of the empire's partition, with no thought of the morrow. Until now it has been completely blind to the force of the popular will and has deemed it not worth while to bother with the common people.

Long ago patriotic Chinese gave up hope in the Manchu government and realized that China's salvation lay in the taking over of the management of affairs into their own hands. For over a decade Dr. Sun Yat-Sen and other Chinese of courage and ability, mostly those with a Western education, have been busily engaged in secretly preaching revolutionary doctrines among their fellow-countrymen and preparing for a general outbreak. They collected numerous followers and a large sum of money. The revolutionary propaganda was being spread country-wide, among the gentry and soldiers, and even among enlightened government officials, in spite of govern-

mental persecution and strict vigilance. Revolutionary literature was being widely circulated, notwithstanding the rigid official censorship.

Added to all this are the ever important economic causes. Famines and floods in recent years have greatly intensified the already strong feeling of discontent and unrest, and served to pile up more fuel for the general conflagration.

In short, the whole nation was like a forest of dry leaves which needed but a single fire spark to make it blaze. Hence, when the revolution broke out on the memorable 10th of last October, at Wu-Chang, it spread like a forest fire. Within the short period of two weeks fourteen of the eighteen provinces of China proper joined in the movement one after another with amazing rapidity. Everywhere people welcomed the advent of the revolutionary army as the drought-stricken would rejoice at the coming rain, or the hungry at the sight of food. The great wave of democratic sentiment which had swept over Europe, America and the islands of Japan at last reached the Chinese shore, and is now rolling along resistlessly over the immense empire towards its final goal—a world-wide democracy.

All indications seem now to point to the success of the revolution. The Manchu dynasty has been reduced to a helpless and pitiful state, with neither supporters nor financial backing. It is doomed. Yuan Shi-Kai cannot prevent the inevitable. He either is blind to the trend of the time or overestimates his strength in trying to oppose the popular will. He cannot do it successfully, and no one can. The will of a people who are fully aroused is the supreme law of the land. They have the power and with it can have what they want. The Chinese people are now fully aroused, and "though they prefer peace almost on any terms to war," as a leading New York daily recently observed in its editorial column, "there are limits to their submissiveness, and when these limits are passed they can fight as well as anybody else. Certainly it is not courage they lack or the stern determination that does or dies." Yuan might just as well try to stop the mighty torrent of the Yangtze Kiang as to oppose the will of over four hundred million aroused Chinese. If he succeeds in checking it temporarily, he only makes it all the more violent and irresistible later. The revolution is sure to reach its goal, because it is the movement of the people

and the battle of the right and true, which are bound to win out in the end.

There is, however, just one thing which can prevent the revolution from attaining its ultimate success, namely, foreign intervention. But, fortunately, the ambitious Powers have not been furnished with any excuse to intervene and have observed strict neutrality thus far. It is to be earnestly hoped that they will maintain their present attitude so long as their citizens are protected in China. The Middle Kingdom ought to be given a chance to work out her own salvation, and she is fully capable of doing it. Let no civilized nation, on the pretext of protecting the life and property of a few of its citizens, kill a great cause for a small one and snatch away from millions of people their opportunity to gain liberty and personal rights in order to shield a handful of individuals.

Moreover, if commercial countries wish to see peace restored in the empire so that trade can be again carried on there, they should not for that reason bring pressure to bear upon the contending parties with the view of effecting an early settlement. In order that peace may be permanent, it must be established on a firm basis, on terms satisfactory to the people directly concerned. Should the Powers unite to compel the republicans to compromise with a constitutional monarchy, as it has been intimated, temporary peace might be brought about, but fresh trouble is certain to arise, resulting in a further stagnation of trade.

The prevailing sentiment in China is strongly in favor of the establishment of a republic, and nothing short of that, it seems, can satisfy the people. The question may be raised here with perfect pertinence, "Are the Chinese ready for a republic? Are they not like a child which, seeing other boys run, tries to do the same, while it is barely able to walk?" Upon this point there is a great divergence of opinion; some think the Chinese are absolutely incapable of governing themselves, while others claim they are fit for self-government, with a great majority of observers favoring a constitutional monarchy.

People in China want a republic not because they desire to be fashionable or up-to-date. They are not an imitative race, be it said to their discredit or credit. They are conservative and deliberate. They accept things they think are good for them and reject things they consider useless or harmful. How heartily they welcome

Western learning, railroads and steamships! How stubbornly they fought against the importation of opium into their country by England, much as they scorn the use of force!

The Chinese have reasons for wanting a republic and for not temporizing with a constitutional monarchy. To them the very thought of having a Manchu emperor as figurehead for the latter form of government appears ridiculous as well as obnoxious. They would consider it an act of insanity to retain him now that they no longer have to, after struggling for years to get rid of him. For nearly three centuries the Manchus have been an inexhaustible source of corruption and evil in the Chinese government. Young China wishes to have a thorough house-cleaning and to get at the root of the evil. Furthermore, a figurehead like that can be easily put there, but once there, is extremely hard to get rid of. If a logical candidate could be found among the descendants of Chinese royalty to head the limited monarchy, the people might agree upon a constitutional government. But, since there is none to be found, and the selection of a head from among the rebel leaders would breed quarrels and jealousies, it is deemed wise and expedient to avoid these difficulties by the establishment of a republic.

This most advanced form of government is not a brand new thing to the Chinese. Village government, which is self-government in miniature, has existed in Chinese communities for centuries, and has been a pronounced success in preserving peace and order among the inhabitants. It is a great feature of the Chinese civilization.

Nor is the idea of equality of man, which is the fundamental principle of democratic government, a new concept to a people among whom no class or caste system has ever existed. Among the Chinese there are no classes except such as those determined by vocations. According to the old and practically the only classification, scholars have the highest social status, with farmers next and laborers and merchants standing at the bottom of the social ladder. But, as every one is free to choose his own profession, the system is really based on a purely intellectual standard. What could be more democratic than this? Through sheer mental ability a person can become the prime minister of the empire. There is nothing to stop him. The age-long experience of the Chinese in village government and their intellectual democracy have indeed given them an excellent preparation for political democracy.

Besides, the Chinese as a race possess many good civic qualities, such as law-abidingness, industriousness and love for peace, which should greatly help to make self-government work successfully. The calm and orderly way in which they have conducted themselves during this revolution may be cited as a convincing proof that they are quite ready for a republic. No less encouraging to the republicans is the success of the various provincial assemblies, whose members were chosen with rare judgment by the people.

With able, intelligent and unselfish leaders in charge of government affairs and with the training and characteristics of the people already mentioned, there is every reason to believe that a republic is feasible and workable in China, and that order will be quickly brought out of the present chaos. Substantial and pressing reforms will be instituted and carried out along educational, industrial and other important lines, under a strong, responsible and responsive government. With a republic once securely established, and with the country properly started on her reform movement, it will not be long before China becomes a modern and progressive nation, and takes her rightful place at the world's council-table. When that peace-loving people are at last able to stand upon their own feet, a long step will have been taken towards realizing the long-dreamed-of and much-talked-about universal peace. The so-called balance of power of the world will then be established. No longer will there be any fear of international conflicts arising out of China's weakness, as has been the case in the past. China will continue to adhere to her traditional policy of peace and honesty and lend a strong hand to the world's peace movement—a movement which is supported by all interested in the advancement of humankind.

CERTAIN ASPECTS OF CHINESE RECONSTRUCTION

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It is a well-known and a very instructive fact that for the last eighteen years, China and the Chinese have increasingly monopolized the attention of the rest of mankind to an extent which finds no parallel elsewhere. This is not merely because—as we are so often reminded—China is the oldest, the most populous, and by far the most homogeneous empire now in existence, but because in a great variety of ways, China and the Chinese from being one of the most secluded of peoples, have gradually, unconsciously, and without any desire on their own part become involved in intimate relationship with practically all the leading nations of the world. The acquaintance with Far Eastern affairs on the part of Occidental peoples as a whole is of much too general and incidental a character to be described as knowledge.¹ Chinese history has been thought of as inherently interminable, monotonous, incomprehensible and arid. Although the same relations of cause and effect elsewhere perceived to be invariable in human affairs obtain in the evolution of China, it has until recently been assumed that the causes were inherently obscure, and the effects for the most part but slightly related to Western civilization. There have always been, of course, an instructed few who knew better, and who did their best according to their lights to make others recognize the truth, but their efforts met with but a limited success. The dramatic and swift-moving struggle between "little Japan" and "big China" in the years 1894-5 immediately attracted the attention of the world, and held it to the end. Never was a struggle more inevitable than this one, yet seldom has such a contest been so unanticipated, and its outcome so spectacular. This was not merely because the world at large knew too little of the real relations between China and Japan to serve as a basis for an intelli-

¹The chapter appended has been written during the exigencies of railway travel, without access to books, or to the copious clippings and memoranda which under normal circumstances would have been available. It is rather a rough charcoal sketch than an essay.

gent opinion, but also because nearly all things Chinese were wrapped in a more or less impenetrable haze, which made such knowledge of China as may be had of other countries hopeless of attainment. China was beaten, *that* was certain, although the greater part of the empire was never really aware of the fact, and many millions of Chinese seemed to suppose that the struggle with Japan was a "northern war," under the especial patronage of Lord Li Hung-Chang, and had no important relations to the rest of the "empire." There was, perhaps, also not a little satisfaction that "little Japan" had been balked of the most vital part of her conquests, through the collusion of France, Germany, and Russia, who demanded in the interests of permanent peace and the welfare of mankind that Japan renounce her hold upon the Liao-tung peninsula, and be content with Formosa and a cash indemnity. Ten years later the inevitable consequences of this action became obvious to the whole world. By that time Japan had secured Korea, had once more captured the little peninsula and a large part of Manchuria also, the remainder being largely dominated by Russia, who came to an understanding with her alert and invincible enemy, the real struggle being postponed to the uncertain future. And these two powers once in military, railway, and commercial possession have promised to evacuate Manchuria, as the Chinese phrase goes, "when iron trees bear flowers, and in the donkey year." The course of events in China was equally dramatic and surprising. For more than two years the empire was stunned, hopeless and helpless. The return to Peking in triumph from a long exile in Sian-fu the ancient and historic capital of China, of the late Grand Empress Dowager in January, 1902, seemed to promise a new lease of power to the Manchus, whose fortunes had been in grave doubt. She returned to power with a distinctly clarified vision. One by one each of the important reforms of His Majesty Kuang Hsu was adopted by her, as the time was considered ripe. Of these, by far the most important was the displacing (September, 1905) of the ancient system of education by "Western Learning," a compound term of unknown but far-reaching significance. Millions of Chinese scholars were thus automatically reduced to the level of brevet fossils, with no possibility of ever competing successfully for the new mysterious degrees. These mighty changes directly affected some millions of Chinese scholars and

students, and together undoubtedly constitute the greatest intellectual revolution in the history of mankind. But in so vast a country as China, where the impulse to stick by the old ways is overwhelming, it was inevitable that in most parts of most provinces things went on much as before.

The decree extending education to Chinese women (1907) was another landmark of progress, though its full effects can scarcely be realized for a century or more. The dispatch to Western lands of Imperial Commissions of Inquiry in regard to "Constitutional Government" (1905) was a skilful effort on the part of the Empress Dowager to withdraw the attention of the Chinese (especially in the southern province of Kuang-tung, Canton) from present ills, by contemplation of a free gift to the people from the Throne of a share in their own government. As the ancient sages and the sacred classics had much to say about "the People" (who are the "Root" of a country, Heaven thinking as the people think, etc.,) this, while a radical innovation, had, like much else, the air of a sudden return to first principles. There can be no doubt that the intention of the Throne was to tide over present dangers by throwing two or three empty tubs to the whale Demos. One of these was the "Provincial Council," one was "Local Self-Government," and the third and by far the most important, the promised "National Parliament," to meet in 1917. Experts in constitutional law have minutely analyzed the voluminous documents issued by the government, explaining the purpose and the explicit limitations of this imperial gift. It was a formal grant of the right of assembly, of discussion, and of petition, under careful precautions to guard against any assumption of a power to legislate, or to demand concessions from the Throne. In its lower ranges Chinese society has always been in theory frankly democratic—probably quite as much so as that of any Occidental land. It is only at the county (or *hsien*) the smallest sub-division of independent Chinese rule, that the oligarchical official superstructure imposed upon the basal democracy, begins. But theoretical democracy in China, as elsewhere, is so greatly modified in practices by the presence and the influence of wealth, a literary degree, connection with important families, or exceptional individual abilities, that the composition of these forces is frequently anything but really democratic.

To the "Local Self-Government" plan the Chinese are there-

fore inherently predisposed. But practically much less seems to have been made of it than might have been expected. This was not improbably due to the numerous points of friction between local self-government bodies, small, isolated and inexperienced, and the county magistrates with whose prerogatives and perquisites there would be almost inevitable interference. Nothing but extended experience, mutual co-operation, and above all, time, is needed to enable Chinese bodies for local self-government when duly authorized and recognized from making themselves universally felt.

The progress made by the "Provincial Councils" in the two short seasons in which they have had opportunity to find themselves and their place is altogether unique in Chinese history. These bodies be it remembered were never intended as other than harmless blow-holes and escape-valves for popular effervescence, with no real power and, indeed, with no functions of importance. Those who knew most about China recognized the inherent futility of elaborately constituting a complicated body with a totally uncoordinated membership merely to discuss matters of importance, but over which they could exert no practical influence whatever. The essential sub-stratum of Chinese democracy had now, however, an opportunity of asserting itself. Never before had gentry and commoners been summoned to deliberate, not, let it be remembered, to decide, in regard to public affairs—especially taxation—in the virtual presence of the Governor, a mighty official hitherto immune to popular suggestion much more to criticism. But every Provincial Council took itself most seriously. It did not indeed know its business, nor how to do it. But it listened to the primary lessons in procedure given by the Governor's deputy, and took careful note that the matter of public revenues was included in their somewhat narrow horizon—"What revenues do you want for the coming year?" the delegates in their innocence and verdancy inquired. When the sum was named, they at once proceeded to ask further: "What was done with the amount produced by last year's taxation?" In China nobody "from below" ever ventures to make inquiries like this. It is the business of the officials to levy the taxes, and of the people to pay them—"theirs not to reason why."

Under these novel and irritating conditions, and there were others aplenty, the Governors would gladly have swept the whole

set of "Councils" into extinction. But having been appointed by the Throne to do a specific act, no matter how futile, it was beyond the power of any Governor to deny or to ignore the right of the delegates to inquire. But more truly than in the Arabian tale the Afrite had actually emerged from the bottle officially uncorked, there he was large and threatening, and ever growing larger and more threatening. For behind all this "Constitutional Government" foam and sound, there was the great sea, the implicit rights of the people to be heard from and to be regarded, a right long ignored but soon to become more and more explicit and insistent. If the evolution of the Provincial Councils, albeit in very different ways and degrees from non-existence into "triumphant democracy" was rapid and striking, that of the National Assembly in Peking, the germ of the distant Parliament, was far more so. Half of this body was directly nominated by the Throne and must, of course, have been considered thoroughly safe custodians of the interests of the officials strongly entrenched in hereditary power. The other half of the body were appointed by the Governors of provinces from nominees whose names were sent in by the Provincial Councils principally, if not entirely, from among their own number. In this case also it is certain that only the *safest* candidates would have been appointed. The assembly was presided over by a Manchu hereditary Prince, an additional guaranty of conservatism. And yet the National Assembly, so constituted and limited in the range of its action, by lack of knowledge, lack of experiences, and the inherent difficulties of their position, succeeded during the three months of their session in achieving results of a most surprising character. They learned almost at once to take the opposition side and to act together. They forced the hands of the Prince Regent and virtually compelled him to shorten by some years the date of the longed-for Parliament, which was now put down for 1913. They freely criticized the heads of the leading departments of the government, and they even went so far as to impeach the semi-sacred Grand Council itself, as being an inefficient and an irresponsible nuisance. No such attack on vested rights and prescriptive privilege had ever, we may suppose, been made in Peking before. The insistent demand for a budget and for explicit statements of revenue and expenditure brought clearly to light the existing financial chaos,

and plunged the assembly into a morass and a jungle of accounts and statistics from which, after more than forty days of arduous work, they emerged, to say the least, with more credit than did the Board of Revenue. The Prince Regent not only did not summarily dismiss the assembly as the late Grand Empress Dowager would assuredly have done, but temporized with them, and added ten more days to their session.

This first meeting of the National Assembly in the autumn and winter of 1910 must be regarded as of prime importance as an initial flight of parliamentary petrels trying their wings in stormy gales. Every lesson here learned will be most valuable in the turbulent days which are yet to come, when China is more or less blindly attempting to solve anew the age-long and world-wide questions which even twentieth century democracy finds as perplexing and as insistent as ever they have been in the past—nay, much more so. How can ancient China sailing, with its clumsy junk-of-state, under a "republican" flag navigate such dangerous and uncharted seas?

Probably few Chinese have ever heard the name of Fisher Ames, one of the delegates to the Constitutional Convention which adopted the basis of the American Union. Yet his sage remark is strangely applicable to China to-day, as it was in the thirteen colonies in 1789. "A monarchy," he is reported to have said, "is a stoutly built ship; yet it sometimes strikes a rock and goes down. A republic is like a raft, it never sinks, but then your feet are always in the water."

For several months China has been once more thrown into convulsion and in an altogether novel manner. Owing to certain peculiar teachings of their most revered sages, Confucius and Mencius, the Chinese have always cherished and exercised what has been termed "the right of rebellion." When the ruler has obviously lost "the decree of heaven," which alone authenticates him as ruler, then may the Superior Man, who is himself taught of heaven, resist and depose that ruler; thus the Chinese have always been specialists and experts in the art of rebellion, insomuch that it is estimated that there have been fifty first-class rebellions in the past two thousand years, as well as minor ones quite beyond count. But no one of them bears any real resemblance to the present uprising, which not only potentially and prospectively pervades every

part of the empire, but is even more really felt by Chinese living abroad in every land and under every sky where Chinese emigrants make their home. Each passing week has showed how largely China's revolution, not rebellion,—the first in more than two thousand two hundred years of turbulent history—is at bottom a race question. It is now two hundred and sixty-seven years since the Manchus, not uninvited and certainly not at all reluctantly, took charge of the Chinese Empire. In the slow progress of the domination of so vast an area multitudes of Chinese were killed, and many more died of hunger, fright, disease, or committed suicide. All these are familiar phenomena in China and were only such as the ending and the beginning of other dynasties as well as the latest have always witnessed. But in the new national self-consciousness, the ancient memories of these wrongs have, like unquiet ghosts, risen from the dead to irritate the Chinese and to terrify the Manchus. The latter cannot be more than a few millions in number (how many in the absence of any census it is impossible to say), and with all China once aroused against them as never before, their position becomes precarious and untenable. Other aspects of the race problem in China are found in the friction, sure to increase, between Chinese and Môngols, Chinese and Mohammedans (who have been for much more than a thousand years a mechanical and not a chemical mixture with the Chinese), Chinese and the Thibetans, and particularly Chinese and the "aboriginal" tribes who form a large part of the population of some of the southwestern provinces, as Kueichew and Yunnan. They, too, have begun to awaken to self-consciousness, and can no longer be governed by the ancient methods of cajolery, bribery, and brutality.

Surely no problems of the coming China are more intricate, more exigent, more perilous than those relating to the numerous and diverse races of the vast territories of the Chinese Empire. The Chinese have always believed their theory of government to be perfect—it failed only in practice. Ages of corruption not unlike that of Turkey have necessitated ages of misrule and oppression, and have brought to pass the unhappy and until lately almost hopeless China with which we are too familiar. Can China under a so-called republic effect a radical cure of these hideous cancers and gangrene, which have been eating out the life of a great

people? The wonderful success in arousing not merely a national consciousness, but what is far more difficult, the national conscience in a life and death struggle with opium, against odds almost overwhelming, show what unanticipated and even unimaginable reserves of moral power are available in China.

Far more than most peoples in history the Chinese have always had ingrained in their moral race-fiber deep reverence for that righteousness which is one of their Five Constant Virtues. Their long history is studded with shining examples of its practice, even in times of darkness and despotism. New light has come to China from the West, from the past, and from above. A new public sentiment has begun to crystallize in China, and there is every indication that it may eventually be as resistless as a tidal wave. This may not, will not, come suddenly, but it will come, and it will be at once the bulwark and the backbone of the new nation. At the opening of a year certain to be full of surprises, when nothing can clearly be foreseen as to the specific turn of events in China one can only say that regarded from any point of view it is one of the most interesting, and one of the most important events of contemporaneous history that the oldest and most populous of empires should throw its past into the melting pot in order to gain a bright and a glorious future. In this great struggle China deserves and will have the sympathies of the great republic of the West, whose problems are so widely different, and yet in essence so alike. A new China will help to make a new Asia, and will both directly and indirectly influence the whole world.

REPUBLICAN GOVERNMENT IN CHINA

BY CHESTER LLOYD JONES,

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For a quarter of a century political prophets have been foretelling the awakening of China. Each year seemed to promise the abandonment of the old and the entry of the new regime, but each year at its end left conditions surprisingly like they were at its beginning. So often were we told of the dawn of a new day for China and so often disappointed that many despaired that the sleeping giant would ever awake, and the countries of Continental Europe even concluded that his goods were for him who would take them.

Plans to Adopt Experience of Western Nations

The last ten years have shown, not a foreign policy increasingly strong but a realization on the part of China of her own weakness. She has recognized the necessity of an entire recasting of her form of government. The Boxer troubles and the subsequent settlement with foreign powers brought home even to the conservative Manchu throne the necessity of at least a conservative program of reform. In 1906 the first traveling commission of five members was appointed to discover by study in Europe and America the reasons for the national strength of Western States. China had ceased to look upon her own civilization as perfect, and was willing to adopt whatever had proved excellent in the experience of others. The returning commission reported, "It is the unanimous opinion of these commissioners that the backward condition of China is due in the main to the lack of confidence between the throne and the ministry, on the one hand, and the masses of the people on the other." On February 18, 1907, an imperial decree issued declaring: "Foreign countries acquire wealth and power by granting constitutions to their people with the privilege of the ballot. Thus the interests of the Sovereign and his people are interlaced so that what affects the one affects the other. It is necessary that we in China should, after careful investigation, prepare to imitate this constitutional type of government, and, while retain-

ing supreme control in the hands of the Throne, should entrust the administration of their own interests to the people themselves, through their chosen representatives."

But this could not be done at once. A preparatory program was outlined. The official system was to be reformed, the laws were to be revised, universal education established, the army was to be reorganized, an efficient system of police introduced, and the revenue and expenditures of the government placed on a sound basis. This was no small program in itself, a series of tasks which would stagger the boldest of administrators even in a country with a government as absolute as that of China is in theory, but is not in fact.

Provincial Experiments

In one province the policy of reform was immediately put to the test. In Chih-li, the most important viceroyalty of the empire, one of the ablest of Chinese statesmen, Yuan Shih-kai, was viceroy. He at once introduced important reforms throughout the province, especially at its principal city, Tientsin. Public works and police were put in a state of efficiency previously unknown. The provincial officials were given periodical instruction in constitutional government, at the provincial capitol. To prepare the people for their coming responsibilities, the first step the Viceroy concluded would be to introduce local self-government.

A beginning was made in 1907 when the first "popular" municipal government in China was set up in Tientsin. The government was organized on western models adapted to local needs. A municipal council of thirty members was elected for two years by a convention of 135 delegates chosen at a general election. This indirect election is not different in principle from the way in which Senators are elected in the United States.

The suffrage is restricted. Only males, twenty-five years of age or over, able to read and write, natives of the city or five-year residents, owning property to the value of 2,000 taels can vote. A candidate must be a qualified voter who is a college graduate or author of a work which has received official recognition, or a director of a school or public enterprise, or an ex-official. The voting methods follow the best western usage, and the proceedings of the council are protected nominally at least by the usual parlia-

mentary privileges. An executive board of nine, elected for four years, part of whom retire every two years, carries out the decrees of the council. The first election under the new regime was held on June 15, 1907, and the electoral college met on July 24, to select the Municipal Council of Tientsin. The latter body convened August 18th.

The experiment was one avowedly undertaken to test the possibility of introducing western forms of government into China. If successful the system was to be extended to other provinces so that training in self-government might precede the introduction of the national constitution. Each province was to be granted a provincial constitution and to conduct its affairs through a representative assembly, which was to serve *de facto* as a training school for the new national legislature. The success of the first experiment encouraged starting further reforms. September 1, 1907, an edict issued promising a constitutional government as soon as the people were ready for it. The people were promised a new national legislature to consist of two houses. A preliminary step was taken at once in the calling of a national consultative assembly known as the "Council of Advice." Its members are nominated partly by the central government, partly by the provincial assemblies. The functions of the body are indefinite, but are probably intended to be advisory rather than truly legislative, like the advisory councils of India.

Another edict established similar consultative assemblies in the provinces to discuss projects of provincial legislation. From these assemblies a certain portion of the members of the national body were to be selected. The provincial assemblies it was first planned to have chosen by the governors, but the protests which arose brought the issuance of a new edict in 1908 by which they were made elective. This does not mean, however, a true popular election; for in the provincial elections as in the municipal election at Tientsin a property qualification is enforced which, quite apart from other requirements, shuts out all but a small portion of the people.

The Proposed National Legislature

Public opinion now began to outrun the government's plans for reform. As mentioned above, the government had to make concessions in the manner of election to the provincial assemblies.

It was also objected that the decrees were not definite as to the powers and organization of the proposed national legislature. The nomination of a portion, presumably the majority, of the members, especially aroused criticism, because the people considered it an expedient by which the form of power was granted though the substance was withheld. The principle of election recognized in the provincial assemblies they felt should be extended to the national body and its powers should be made truly legislative. National regeneration could be brought only by the speedy creation of a sovereign parliament based on direct election by the people of the provinces. Universal suffrage they still recognized would be unwise. Property or educational qualifications would be accepted, but the representative principle must be recognized.

Feeling its hold on popular opinion slipping away, the government in December, 1907, issued decrees urging conservatism and asking that the people in their enthusiasm for western methods of government should organize in the orderly manner adopted by European political parties. Partly due to the pressure of public opinion, too, there had been created in 1907 a "Commission for the Study of Constitutional Government," to make a study of the political conditions and needs of China, and make a report to the throne and Grand Council as to what foreign political institutions should be adopted or adapted to Chinese needs. The commission set to work at once. A vote taken in May, 1908, is significant of the temper of its members. On the question of how soon a constitution should be granted, four voted for a delay of two years, seven for five years, eight for seven years, twelve for ten years, and one for twenty years. Those who voted for the shorter periods had been educated in the old Chinese classic schools or in Japan, those favoring a longer delay in America or Europe. The government still stood with the conservatives, and on August 28, declared again for the issuance of a constitution in 1917.

The Commission for the Study of Constitutional Government outlined a plan of reform which was to extend over the intervening period and would prepare the public for its new responsibilities. Prominent among the projects was the introduction of new educational methods by which the commission hoped that one-half of the population of China would be able to read and write at the time the constitution was actually granted.

The Work of the Provincial Legislatures

Meanwhile the plans for elective provincial assemblies were being rapidly forwarded. The first provincial elections occurred in the spring of 1909. On October 14, provincial assemblies met in every province of China to discuss the affairs of the respective provinces. They met again in 1910, surer of their powers and enthusiastic for local reforms. In several of the provinces they came into active conflict with the policies of the local governors. Differences of this sort were carried to the central government, which is said to have given its moral support uniformly to the local legislatures against the governors.

Constructive legislative work also seems to have been accomplished in most of the provinces. The success attending the suppression of opium in Szechwan, the most populous province of all China, is largely due to the action of the local legislature, and in Kwantung, the great southern province, gambling has been successfully repressed by the same means. It is the generally expressed belief that the provincial assemblies give promise of fully justifying their creation.

An interesting outgrowth of the provincial bodies is the "United Association of the Provincial Assemblies," formed in Peking in June of this year, which has committed itself to the program "To respect the monarch and constitution, to improve and reform administrative matters in the provinces, to develop the financial resources of and for the people, to further popular intercourse with foreigners and exalt the military spirit in education."

The National Assembly

The second year of the local assemblies was the one in which occurred the first meeting of a national representative body in China. On October 3, 1910, the Prince Regent opened a meeting of an assembly of 202 members, the majority appointed by the government, the others elected by the provincial assemblies. Here, as in the Commission for the Study of Constitutional Government, the question of the date for issuing the new constitution forced itself into consideration. The conservatives again urged a period of delay for preparation, but public opinion had rapidly grown in favor of creating a national legislature of two houses as soon as possible.

It was strongly urged that every year of delay which left China without an efficient government increased the influence of foreigners in the Far East, accentuated the desire for exclusive trade privileges and threatened Chinese independence. Partly because of this fear of foreign influence and partly because public opinion would not be satisfied without concessions, the government yielded and fixed the summoning of a national parliament of two houses for 1913. Demands were made for a responsible cabinet, and the discussion of the national budget took much of the time of the assembly.

The most significant features of the first assembly were its moderation and its insistence that when the constitution is granted it shall include a grant of real responsible government. The expressions both within and outside of the national assembly were decidedly to the effect that the people would not be satisfied without the recognition of the elective principle and a responsible cabinet. To forward these ends there have already arisen political societies known as the Association for Study of the Constitution, and the Association for Preparing Constitutional Citizenship.

On October 22, 1911, at Peking, began the second session of the National Assembly. In the face of the rapidly spreading revolution it is not to be wondered at that it adopted an anti-dynastic and radical program. On the twenty-fifth, it denounced the policy of the government, and the following day memorialized the throne for the immediate institution of a popular parliament. Among its other demands were several for constitutional changes. Parliament is to have full power to revise the constitution. A responsible cabinet is to be formed with a premier chosen by parliament. The parliament is to share the treaty making power and control taxation and the budget. No appointive members are to have a place in the upper house of parliament until the reforms are completed. Under this pressure the government yielded, a constitution was drawn up embodying the reforms, which the crown is declared ready to accept.

The Revolutionary Program

During the year the revolution had spread so rapidly that these radical concessions were no longer acceptable, and opposition to the throne continued. On November 15, one of the most influential revolutionary leaders, Wu Ting-fang, former minister to the

United States, issued a proclamation to the world in which recognition for the Republic of China was asked. It represented the ideals of the more extreme Chinese reformers. It read in part: "Already we have provincial assemblies and a national assembly. Already we have a republic with a full set of competent officials. Within a few days the Constitutional Convention will meet. . . . A constitution of the most enlightened character will be adopted. Following will come . . . provincial national elections. Out of the chaos and dust of the falling throne emerges a free enlightened people, a great natural democracy of 400,000,000 human beings. They have chosen to set up a republic. . . . This is a great democracy." The words of the proclamation, like our own declaration of independence, are not to be taken literally. They represent a declaration of ideals rather than a program of action.

Outside of the empire the plans of the extreme reformers have been viewed with misgivings. The introduction of representative institutions resting on a broad popular basis which threatens to become a part of the reform program is a project which conservative opinion holds may be productive of worse disorder and inefficiency than that which is to be overcome. It is hoped that the influential middle class and the natural conservatism of the Chinese may save them from an advance which may by too rapid a break with previous customs and conditions bring a reaction as unfortunate as that which marked the closing years of the nineteenth century.

Republican Government Impracticable

Parliamentary institutions may be introduced in China, they have shown themselves adaptable to widely varying civilizations, but there are several reasons why a republican government in the sense in which that term is understood in America must still be something which for China will be an ambition rather than a reality.

The most important limitation on the possibility of a republican China is physical. We no longer believe that republics must be confined to small area and limited territory. The invention of the representative system made large republics possible even before the invention of the steam engine and the telegraph. But it still holds true that the difficulties of popular government increase in almost

geometric ratio when area and population become larger without a proportionate increase in ease of communication. We may well doubt whether republican government would be as great a success in the United States as it now is if our railroads, telegraphs and telephones should drop out of existence. Our local officers could still be elected for it is still possible for the candidate to reach them by word of mouth, but a national campaign with our present development in population and territory would be almost an impossibility. How much greater would be the difficulty of carrying on a campaign before a truly popular electorate in China in the face of the transportation conditions found there is shown by a comparison of land areas and population.

The total land area of China proper is 1,532,420 English square miles, that of Continental United States is 1,175,742 English square miles. Communication in the United States by telegraph and steam makes the country practically a unit so far as the transmission of intelligence is concerned. China has hardly begun on her railway and telegraphic development. The Chinese Imperial Customs estimated the population of China proper in 1906 at 438,000,000 souls, the population of the United States in 1910 was 91,972,266. Even assuming all other conditions to be equal the organization of any true republican government in China, under such conditions, would be a task which only a republican enthusiast such as William H. Seward would consider easy. But the actual conditions make the task a hundred fold more difficult. A population five times as great as that of the United States living under transportation conditions not even so good as obtained with us in the days of the canal and stage coach cannot conceivably be reached by party organization. The party machine operating under such disadvantages would break with its own weight. There could be no intelligent expression of public opinion. Not only in political affairs, but in every other field, it is impossible to develop an alert, quickly changing public opinion in a nation of over four hundred millions when mediaeval means of communication are supplemented only by a few thousand miles of railroad and telegraph. China cannot become a popular republic without an improved system of communication.

A second difficulty which confronts republican government in China is the lack of general education and the imperfect character of that which does exist. The people of China as a whole are not

educated for self-government. The grinding necessities of everyday life have shut them off from the possibility of intellectual development. Further, even the educated Chinese have no political training or experience. The old Chinese classic education, divorced from the affairs of everyday life and essentially unpolitical in character, was swept away by Imperial Edict of September 3, 1905, only seven years ago. Since that time great enthusiasm for "western learning" has overspread large sections of the empire. Large numbers of schools have sprung up to supply the demand, but the new instruction is still a reflection from foreign lands rather than a part of the national life, and even such as it is it has not touched the mass of those who in a popular government would be called upon to bear public burdens and determine public policy. China cannot become a popularly governed nation until her educational system has been modernized and brought within reach of the great mass of the population. This is not a problem of a decade, but of at least a generation. In any nation such as China the reorganization of instruction on modern lines means a great increase of national expenditure, an increase which China cannot now nor in the near future assume.

This brings us to the third limitation on the use of popular government in China—the poverty of the country. We are apt to think of China as a land of tea and silks in which the luxury which we associate with the word "Oriental" is a characteristic of the civilization, but the facts make the orient a synonym for poverty rather than riches.

Popular governments are expensive governments. Even if popular government in China would remove the official "squeeze", and the experience of other countries does not show that that result would be automatic, it is doubtful whether the people could bear the expense of biennial or even quadrennial popular elections. If the expense of a national election in the United States with ninety million people runs as high as sixteen million dollars, what would be the expense of an election covering four hundred millions with the added disadvantage of poor communications? It seems hard to avoid the conclusion that in a country so poor as China popular elections would not have popular support, and would even more surely fall into the hands of those who could profit by position, than is the case in western nations. China cannot hope for republican

government on a popular basis until her tremendous economic resources are unlocked in such a way that the standard of life of the average man will rise appreciably above the minimum of subsistence.

Finally admit that communication may be improved, that education may be brought within the reach of the average man, that the average citizen may be raised to an economic position of passable independence, and there still remains the difficulty of the enormous size of the electorate. This is not an insurmountable obstacle, the population of the United States is larger by half than the largest province of China, but a population over four times that of the United States and much over twice that of the two Americas is not easy to organize into political parties even if the unpolitical Chinese develop into the most politically-active nation of the world. The federal form of government might be adopted, but even this would leave the national elections a serious problem, and the organization of the provincial electorates would be no small matter.

The single province of Szechwan had a population in 1906 of 68,724,890, more than twice as large as that of the United States at the time of the civil war and almost six times as great as New York State in 1910. An election of Governor in Szechwan would involve a population half as large again as that now living in New England, the old northwest territory, New York, New Jersey and Pennsylvania. The average provincial election would be held in a territory containing three times as many people as Pennsylvania. The enormous cost of organizing such an electorate we may judge from our own much less extensive task. The chance for corrupt methods among those unused to political responsibility and living on a low standard of life can be left to conjecture.

Prerequisites for Republican Government

If China is ever to become a popular republic on western lines, that day is not near. Economic transformation must come before more than the form of popular government is possible. Revolutions may come and change the organization of the government, an elected president may take the place of the long lived Manchu dynasty, and political developments of this limited sort may help change the economic conditions which make more radical political

changes now impossible. But a republic as that term is understood in America, a government which is controlled through the suffrages of the people or of a considerable share of them, is still far off. China may have a government for the people, but not now one by and of the people. Popular government will come to China as it has come to the rest of the world, only through a slow change of custom and conditions and through a long period of national travail.

For a popular form of government the people must attain a measure of intelligence and a degree of economic independence. To create them, it is first essential that the economic resources of China should be unlocked. For this in turn enormous amounts of capital are necessary. China cannot lift herself by her bootstraps. She has no supply of domestic capital adequate to her needs so she must borrow, and borrow heavily. This was the experience of the United States. To create the possibility of borrowing on any terms which would not threaten the future of the country, the first essential is a strong government which shall inspire confidence on the part of foreign capital and make possible the contracting of both public and private loans on conditions which will assure the greatest benefit to China. When China has solved her economic problem, possibly while she is solving her economic problem, the question of better education for the population can be solved and a greater degree of popular control may be introduced. But for the present her first need is a strong government, and under present conditions that means a government by the few.

The sober thought of China does not overlook the country's limitations. It seems highly unlikely whatever success attends the revolution that there will be a hasty attempt to create in the Far East a New West. Many of the glowing accounts by representatives of young China which have found their way into American newspapers before and since the beginning of the revolution would have been more conservatively phrased had there been probability of putting the plans into action.

If republican institutions are to be introduced into China, it will be slowly and at first only in a very limited form. Whether an elective executive replace the monarch is not of prime importance. It has become familiar to us that the form of the executive is not an essential test of the existence of government by the people.

Lesson of European Experience

Out of the present turmoil some form of parliamentary government will be evolved. The general lines on which the government will develop can to some extent be estimated. To rule China with a system of prefectures such as are found in civilized France, would not only be to use a system under which it would be hard to adjust the law to varying provincial needs, but would run counter to the traditions of the Chinese. Government does not bulk large in Chinese life. The detailed regulation to which we in western countries are accustomed is absent. The government taxes, it controls appointments and examinations for office. Farther than this there have been only occasional assertions of authority. Local self-government is left to work itself out almost without interference. Whatever the theory of the government, the average Chinese is still an ardent advocate of *laissez faire*.

The introduction of parliamentary government in China involves therefore a balance of local autonomy and a strong government. The organization will almost certainly be federal in fact, even if a semblance of the present theoretical centralization be preserved. Since the central government has occupied in the past so restricted a field, how to secure for it the power it should have under the new conditions will be a difficult problem. It seems that whatever form Chinese parliamentary institutions may assume they will more closely resemble those of the more conservative European federative governments than those of the United States.

Germany and Austria, perhaps even Russia, seem likely to be the countries whose experience will offer institutions most easily adapted to Chinese conditions. The constitution of the former country has been given lavish praise by Chinese scholars. The preferences already shown by the Chinese in both provincial and municipal reforms indicate the popularity of the principle of indirect election, examples of which are found in the Prussian and Austrian electoral laws. The method of selection of the Central Parliament in Austria-Hungary, through co-option of a number of members from the local parliaments, is an expedient by which a national body is secured without a national organization of the electorate with its attendant expense, and the disadvantage of enforcing uniformity where diversity is needed. The right of wealth to be represented even to the exclusion of numbers is a rule of prac-

tice in the Chinese municipal elections so far set up. Even if the popular demands bring a wider suffrage the predominance of the well-to-do may be preserved by the adoption of the Prussian three class system of voting assuring to those who have the greatest economic stake in the community, the control over its government. Partly prompted by similar reasons many Chinese scholars have urged the adoption of a scheme of representation of interests such as has been used in Russia and Austria-Hungary. Spiritual interests, boards of trade, representatives of great landed estates, municipalities, universities and rural communes have in the practice of these countries been given a legal share in governmental control. The legislature has become representative of the institutional life of the state rather than of its individual members. Such a plan fits in well with Chinese conditions, the extra-legal guild organizations would if granted representation under such a system prove a valuable support to the government. As has been found in Russia, this method of organization of the state gives great flexibility for the representation of the most diverse sorts of interests and a large variety of governmental units having quite as little in common as Manchuria and Yunnan.

In summary, China will probably find the experience of the countries of Eastern Europe suggestive of what may well be done in the Far East. For this there are many reasons; in the countries of Eastern Europe

- (1) Federal relations are well elaborated.
- (2) A large degree of local autonomy is kept.
- (3) Local customs and preferences are respected.
- (4) Wealth receives consideration in representation.
- (5) The popular element is introduced into government,—distantly it is true, but perhaps as much as Chinese conditions render safe; and
- (6) All this is done while the central administration is left in a commanding position.

The Chinese have suffered too long from inaction. It can hardly be wondered if they desire now to turn to strong government to rescue them from the failures of a government strong only in theory.

THE ONE SOLUTION OF THE MANCHURIAN PROBLEM

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I.

The time has come when it is necessary to face the situation in Manchuria with the utmost frankness. The settlement of the Russo-Japanese war, described by that eminent jurist, the late Monsieur de Maartens, as the most hasty and imperfect settlement with which he was acquainted, still remains the question of all questions in the Far East. If the future is not to be marred by a further weakening of the Chinese polity, if the employment of such an expression as "The Break-up of China" is really to fall into innocuous desuetude, it is essential that the actual issues should now be generally understood, and the whole weight not only of public opinion but of neutral diplomacy thrown quite openly on China's side. Outlines have year by year grown clearer and better defined; the issues have been fined down; we know now what is and what is not. It is no longer a question of this or that opinion; it is a question of certain simple facts; and the facts now set forth, and the construction placed on them, may be quickly verified by any reasonable person.

The first thing to write down clearly is the international status of Manchuria. Manchuria is as much a part of China as the metropolitan province of Chihli. No one, of course, denies that Manchuria has long been an integral part of the Empire; nevertheless there has been a suspicion abroad that it merited being classed with Mongolia rather than with the home provinces. Nothing could be more erroneous; it is as purely Chinese as Shantung. The population is entirely Chinese, since the word Manchu to-day has only an academic value; their sympathies are entirely Chinese; the bonds which unite North China and Manchuria are closer than the bonds which unite the Yangtze provinces with South China, Manchuria having for many years been simply what

the great western plains were to the older states of the American union—a land to emigrate into; and, of all the many Chinese colonists Manchuria has received, ninety per centum come from Shantung and Chihli. To put it concisely, the region is as much Chinese as Australia is British.

This view is not original. It was even shared by the late Lord Salisbury's government in 1900, and was one of the reasons why the Anglo-German Agreement of 1900 regarding China proved absolutely abortive; Germany, after her signature of that document, having stated in no uncertain language that she considered Manchuria outside the scope of the agreement. Yet what a shallow and unreasonable view! Amongst the first acts of the Manchu Dynasty, after it was firmly established in Peking in 1644, is to be found the constant dispatch of expeditionary columns to the northern and northwestern limits of that land to effect the subjugation of nomad tribes, who still lingered in mountain fastnesses, and to check the infiltration of Cossack freebooters who were even then active along the upper reaches of the Amur. Two and a half centuries ago an open title to the land was claimed and made good. The sovereignty of China, publicly established over every inch of the present provinces, and far beyond, by the Treaty of Nerchinsk in 1698 has never been an uncertain sovereignty. Russia, then the only Asiatic power of international importance, solemnly admitted by that treaty all Chinese claims. By subsequent acts Russia half a century ago modified this ancient arrangement; she acquired the uninhabited left bank of the Amur and the uninhabited Primorsk, or Pacific Province, thus giving her an outlet on the Pacific as well as certain valuable riparian territory fit for colonization. In this there was no proper question of territorial robbery, the region acquired had been clearly proved by the flux of time to be too far north for Chinese colonization. It all belonged legitimately to Siberia, which fate has marked as Russian and nothing but Russian. Since then, that is for fifty years, there has been no question of frontier rectification, no question of upsetting a settlement first conceived by Muravieff Amurski, a man with a vision as clear as crystal, for the good and ample reason that a proper and final delimitation had at last been made in 1860, based on what may be called ethnical grounds.

It is important here to insist upon this point very earnestly;

it was the question of Korea, a totally different question, which blurred the outlines and suddenly complicated a simple problem.

The policy of the Japanese in 1895, after they had driven the Chinese out of Korea, in attempting forcibly to annex the Liaotung Peninsula, by which term was included all the territory south of a line drawn from the Yalu River, via Fenghuangcheng and Haicheng to the port of Newchwang, was a false policy, a political error of the first magnitude. The question of the overlordship of Korea, it was only that then, had nothing to do with Manchurian territory; by deliberately mixing the two questions the seed of immense troubles was sown by Japan, both for herself and for others. Frustrated by the action of three European Powers in her attempt to annex Southern Manchuria, Japan publicly admitted in terms which admit of no misconception, "that such permanent possession would be detrimental to the lasting peace of the Orient." These are the words of no less a personage than the Emperor of Japan; and, as events soon showed, not only were they a declaration of policy but a grim prophecy as well.

The sequel proves it. The action of Russia in the years following the retrocession of the Liaotung territory, an action primarily induced by the false lead Japan had given, culminated in two far-reaching tragedies, the Boxer uprising and the Russo-Japanese war. Briefly, as the result of the first tragedy Russia openly attempted to take a great step forward; as a result of the second she was forced to take a half-step backward. Her so-called occupation of Manchuria had never been effective even in a military sense, since had it been so the conflict of 1904-1905 would not have come. Her deliberate attempt to argue that Korea was a geographical part of the Chinese *hinterland* was as cruel as had been Japan's attempt to argue that the northern littoral of the Yellow Sea, be the country Korean or Chinese, openly fell within her sphere of sovereignty. Thus it may be legitimately claimed that no right of eminent domain in any part of Manchuria has been successfully advanced by an alien Power for half a century and that no such right can be advanced. The frontiers of fifty years ago, by virtue of a law as inexorable as that great physical first-truth, the survival of the fittest, call their claims—the Chinese have settled on and cultivated the soil and own the soil. Modern frontiers consist not of rivers or mountains, but of masses of men. Races

occupy their final abodes, and so long as a race does not die a slow political death, the death which Korea died, the right of eminent domain cannot really pass to alien hands. The Chinese as a race are more vigorous to-day than they have been for hundreds of years. Manchuria is for them a microcosm of their future national existence—they cannot any more relinquish their sovereignty over that region than they can forsake their ancient capital. And this is precisely the view which a study of every important public document loudly proclaims. Let us see it.

It is now generally accepted that the Treaty of Peace, signed by Russia and Japan at Portsmouth, was nothing but an annexure to the real treaty which made war impossible, the second Anglo-Japanese alliance. Formally entered into at London before the plenipotentiaries at Portsmouth had settled any of the chief points of difference, it is this document which gives absolute guidance regarding the post bellum status of Manchuria, the point of peculiar interest at the present moment. For at the time of its making, this treaty, in a higher sense, was not so much an alliance as a pronouncement of policy, of exactly the same nature as the no less far-reaching declaration of President Monroe regarding the American continent. England laid down certain principles; Japan accepted them. It is a fact which is not disputed that Great Britain, through her control of the Suez Canal, not only controls the Oriental trade but dominates the political relationship that Europe bears to Asia, a relationship which is still almost entirely decided by sea-power, a condition amply proved by the Manchurian campaign. The strategic possessions, beginning with Gibraltar and Malta and ending with Singapore and Hongkong, are the outward and visible signs of that domination which is by no means as shaken as many suppose. Certain principles flow naturally from that domination; those principles found clear expression in the arrangement made in London.

The preamble of the Anglo-Japanese Treaty stated the three-fold subject of the alliance thus:

(a) The consolidation and maintenance of the general peace in the regions of Eastern Asia and of India.

(b) The preservation of the common interests of all Powers in China by insuring the independence and integrity of the Chinese Empire and the principle of equal opportunities for the commerce and industry of all nations in China.

(c) The maintenance of the territorial rights of the high contracting

parties in the regions of Eastern Asia and of India, and the defence of their special interests in the said regions

It is manifestly only the last paragraph of these three which concerns us here. Though the second paragraph deals specifically with the question of insuring the independence and integrity of the Chinese Empire, the third paragraph may seem to qualify that declaration by speaking of "the special interests" of the high contracting parties in the regions covered by the agreement. But a careful study of the eight main articles of the treaty proves conclusively that there was no question at all of Manchuria in the minds of the signatories; in the year 1905 this agreement was purely a defensive agreement from the point of view of both the signatories. The full explanation of the expression "the special interests of the high contracting parties" is to be found in Articles III and IV—the only two of the eight articles which say anything at all about territory or interests—the other six being in the nature of a military convention and nothing else, aimed at Russia. To quote these two articles is to show their singular force:

Article III.

Japan possessing paramount political, military and economic interests in Korea, Great Britain recognizes the right of Japan to take such measures of guidance, control and protection in Korea as she may deem proper and necessary to safeguard and advance those interests, provided always such measures are not contrary to the principle of equal opportunities for the commerce and industry of all nations.

Article IV.

Great Britain having a special interest in all that concerns the security of the Indian frontier, Japan recognizes her right to take such measures in the proximity of that frontier as she may find necessary for safeguarding her Indian possessions.

It must be at once apparent to the least reflective that these two articles, carefully set together, balance one against the other just because they are so juxtaposed. Japan had special interests in Korea, which was not then annexed; England had a special interest in all that concerned the Indian frontier. That is to say that the annexation of Korea and British action in Afghanistan and in the Persian Gulf as defensive measures against Russia, who was still the enemy and an unbeaten Power in both an economic and military sense, were contemplated as possible and even prob-

able. As regards Manchuria it was simply anticipated that, though military evacuation must come as soon as peace was officially registered by a solemn decree, it would require the passage of years to allow a vast region which had been the scene of such dissimilar ambitions and such heroic conflicts to revert completely to Chinese control. The writer has recently assured himself in London in the highest quarters that this view is absolutely correct. No one, then, who is not wilfully perverted, need now argue that England has acquiesced at any time in the dismemberment of Manchuria. What many suppose to have been a conspiracy of silence has been proved to have been nothing more than the indifference of an ignorance now happily dispelled.

A brief examination has now been made of what may be called, in Bismarck's phrase, the Imponderabilia of the Manchurian situation, the things which still exert influence and which qualify or modify, as the case may be, the active factors of the day. In other words, the general view is now complete. In the next section it becomes necessary to be much more specific and to show that all published diplomatic documents dealing with Manchuria, which China has given to the world in good faith, proceed clearly and absolutely on the only assumption which can be drawn from the text of the Anglo-Japanese alliance of 1905, to wit, that it would require the passage of years to allow a vast region which had been the scene of such dissimilar ambitions and such heroic conflicts to revert completely to effective Chinese control.

II.

The particular status of Manchuria, from the Russo-Japanese standpoint, finds no better definition than in those articles both of the Portsmouth Treaty and the confirming Chino-Japanese Treaty of the same year which deal with the question of military evacuation. From these articles it is likewise made absolutely and unquestionably clear, no matter what claims may have been subsequently essayed, that Manchuria is inevitably destined to revert completely to Chinese control, provided that the Chinese Empire as a political unit is consolidated and modernized. It is well to mention also at this point, though the argument belongs to later paragraphs, that it was just as specifically and clearly laid down as a condition of peace that China be at once allowed an absolutely free hand in developing

the resources of the entire region. There can be no more argument about these points than about the solar system.

Article III of the Portsmouth Treaty states:

Japan and Russia mutually engage:

1. To evacuate completely and simultaneously Manchuria, except the territory affected by the lease of the Liaotung Peninsula, in conformity with the provisions of Additional Article I annexed to this Treaty; and

2. To restore entirely and completely to the exclusive administration of China all portions of Manchuria now in the occupation, or under the control, of the Japanese or Russian troops, with the exception of the territory above mentioned.

The Imperial Government of Russia declares that they have not in Manchuria any territorial advantages or preferential or exclusive concessions in impairment of Chinese sovereignty or inconsistent with the principle of equal opportunity.

And this is followed by this frank admission:

Japan and Russia reciprocally engage not to obstruct any general measures common to all countries which China may take for the development of the commerce and industry of Manchuria.

It is well that there is on permanent and clear record such a political confession as this. For the use of this language makes it unalterably clear that save for the Manchurian railways and the leased territory, the redemption of each of which is specially provided for, neither Russia nor Japan can claim to-day in Manchuria any right whatsoever.

But there is more to confirm the leading idea so loudly insisted upon in the historic year 1905, that every possible vestige of alien political predominance should be removed as soon as China proved herself capable of maintaining law and order. The text of the Chino-Japanese Treaty of December, 1905, besides confirming matters relating to Manchuria dealt with in the formal Treaty of Peace, has the following remarkable declaration which it should be easy for the Chinese Government to give effect to, when constitutional government is in full working order two years from now,

Article II states:

In view of the earnest desire expressed by the Imperial Chinese Government to have the Japanese and Russian troops and railway guards in Manchuria withdrawn as soon as possible, and in order to meet this desire, the Imperial Japanese Government, in the event of Russia agreeing to the withdrawal of her railway guards, or in case other proper measures are

agreed to between China and Russia, consents to take similar steps accordingly. When tranquillity shall have been established in Manchuria, and China shall have become herself capable of affording protection to the lives and property of foreigners, Japan will withdraw her railways guards simultaneously with Russia.

As soon as this article is enforced, we shall get the final and proper view of the situation in Manchuria, that is, the true perspective.

It will be this. Until 1923, Japan, manifestly the predominant power from the Chinese standpoint because her position is coastal and not inland and because she is at home in the Far East, will administer the leased territory of Port Arthur, the Antung-Mukden Railway, and the main double-track railway from Dairen to Changchun. After that date (*a*) the rendition of the leased territory, specifically provided for by Article III of the original lease agreement of March, 1898, and (*b*) the sale of the Antung-Mukden line specifically provided for by Article VI of the additional agreement of 1905, which says that "the railway shall be sold to China at a price to be determined by appraisalment of all its properties by a foreign expert, who will be selected by both parties," will simply leave in Japan's hands the double-track commercial railway running from the port of Dalny to the Central Manchurian town of Changchun. In the year 1939 this railway can be bought back on terms clearly laid down by the original statutes of the Chinese Eastern Railway Company, Section 30 stating unequivocally that "on the expiration of thirty-six years from the time of completion of the whole line and its opening to traffic, the Chinese Government has the right of acquiring the line on refunding to the company in full all the outlays made on it." And on the same date the Russian trans-Manchurian system, the last remaining right which Russia possesses in Manchuria, should pass by purchase in the same way into Chinese hands.

There is nothing complicated or obscure about these facts; they are as clear as crystal. The only possible complication which can arise is not in Manchuria, but in China. Should China fail to modernize herself completely, that is, fail to take her place as a first-class military and political power amongst the family of nations within the period named, then, of course, this argument fails. Fundamentally, then, the solution of the Manchurian Problem has

nothing to do with either Russia or Japan; it is simply a part of the general problem of the modernization of China. The two Powers, having years ago proclaimed to the world what their only possible policy can be in Manchuria, evacuation and sale of all concessions to the sovereign Power, provided that sovereign Power proves conclusively that she has become master in her own house and is therefore able to prevent any disturbance of the balance of power and peace within the limits of her territory, these two Powers cannot to-day put forward new claims. To do so would be to place themselves outside the family of nations, by declaring their pledged faith to be a matter of pure opportunism and nothing else. It is indeed just as essential for Russia and Japan to secure the restoration of natural conditions. It was mutual suspicion and jealousy which brought them face to face in Manchuria; which made them go to war; which cost them untold millions; and the effective garrisoning of Manchuria by strong Chinese corps and the complete restoration of Chinese sovereignty will once and for all remove the danger of collision, which must always exist so long as they remain as they now are, by interposing a strong buffer state. Only in the frontiers of Korea should the three rival empires meet; and there the nature of the country is such that there is no more incentive to a forward movement than there is in the exactly parallel case of the Pamirs.

The case being such as has been detailed, it is to be regretted that the after-effects of a misleading obscurantism should still tend to mar the natural solution of a problem which can be resolved into the simplest elements. This obscurantism, the fear what it may lead to, alone blurs the outlines, alone disturbs the future.

The clause in the Treaty of Peace which is of the very greatest importance just now to the world at large in view of the large financial accommodation being given to China, is the Article IV already quoted, that "Japan and Russia reciprocally engage not to obstruct any general measure common to all countries which China may take for the development of the commerce and industry of Manchuria." Obviously this clause is susceptible of many constructions; but the natural construction is the simple one that China should be given a free hand so long as her action is not dictated by a crude desire to upset the delicate balance existing between two alien Powers—before the time for complete evacuation has arrived.

Now economic development in the modern world is impossible without modern appliances; and of all modern appliances railways are probably the most important. That China should be virtually restrained during a period equivalent to a whole generation, say from 1905 to 1939, from building railways in Manchuria is in itself an intolerable state of affairs. Yet something suspiciously resembling a veto was placed by Japan, and then by Russia, on the Chinchow-Aigun scheme, Japan basing her action primarily on a private arrangement virtually forced on China and conflicting directly with the solemn international engagement made at Portsmouth not to obstruct general measures for the development of the commerce and industry of Manchuria. It is best to state this matter frankly, as it must come up again very shortly.

The Chino-Japanese Agreement of 1905, ratifying the Russo-Japanese Treaty of Peace, was not brought to a successful conclusion without the danger of a summary rupture of negotiations. One of the rocks on which the conference nearly split several times was this particular question of railways. Japan was at great pains to insist that the building of any line parallel to her South Manchurian railway could not be tolerated because of the injury it would inflict upon the one and only financial compensation she had drawn from her great war. Consequently she pressed for a formal undertaking on the part of China that no such parallel line would be constructed. The Chinese plenipotentiaries, after a great deal of discussion, believing that Japan deserved special consideration in view of the special circumstances surrounding the outbreak of war, finally consented to this provision, but in return requested a definite explanation to be included in the definition "parallel railway." The persistent Japanese answer was that if China assented to the principle, she might in confidence leave it to Japanese honor not to oppose any legitimate Chinese scheme which did not conflict with the undertaking given. The Chinese, in a moment of generosity, assented. The net result has been that Japan, by a policy which has been given very hard names even in diplomatic communications, practically stultified the solemn declaration she made in Article IV of the Portsmouth Treaty. The pressure of public opinion—and diplomacy, has been such, however, that she has already been forced to modify materially her original attitude of blind opposition, and now simply alleges in semi-official publications that her real

objection to the scheme was based on the fact that she was excluded from a participation in that in which she was entitled to participate on the principle of the open-door and equal-opportunity-for-all. The ground, therefore, has already been cleared for a fresh approach toward a solution of this vital matter. It is one that cannot be much longer delayed, since more railways are urgently needed in Manchuria.

A second danger point which may be classed under the term obscurantism is to be found in Article XI of the same agreement. On the surface it is an innocent enough article, but in the near future it may be productive of most serious complications unless China's case is properly supported and properly fought. Article XI states:

The Governments of Japan and China engage that in all that relates to frontier trade between Manchuria and Korea the most-favored-nation treatment shall be reciprocally extended.

Now the most-favored-nation clause, as experience has amply proved in many parts of the world, is a most dangerous clause whenever one nation is very much stronger than another. In the present instance this clause can be so interpreted by Japan that she may claim on the Yalu frontier the two-thirds land-frontier tariff enjoyed by Russia on the Amur and Transbaikial frontiers, and by France on the Yunnan frontier. By landing goods brought from any part of the world at the Korean port of Wiju, which is just across the Yalu River, and then taking them into Manchuria across the new railway bridge by train, a land-frontier tariff can be technically claimed, irrespective of the fact that the economic conditions on this frontier are precisely the same as those encountered anywhere along the China coast, and therefore entirely different from the economic conditions obtaining in distant frontier points such as Manchuria station on the Transbaikial frontier, or Aigun on the Amur, or Szemao and Mengtsz on the Tonkin frontier. On the narrow margins of profits now prevalent in the foreign trade in China, a preferential Yalu tariff is sufficient to give a very decided advantage. Furthermore, there is the deeper question of the free trade zone which may be also claimed on the Yalu under Article XI. Russia has managed to extend the free trade zone, designed only for nomad peoples, from Mongolia to Manchuria; and at Aigun on the Amur the Chinese customs practice is to-day to pass Russian

imports across the frontier free of duty when certified for consumption within a 100-li zone. If this procedure were forced on the Yalu, it would be necessary for the Chinese customs to fall back to Fenghuangcheng and re-establish the old line of the Willow Palisade as the virtual frontier. But the danger would not end here. The coming extension of the Kirin railway via Chientao into Korea will provide a second line of commercial invasion under the much-abused most-favored-nation clause, and complete the breakdown of what is a vital defence if Manchuria is to remain really independent, a strong customs frontier. Already experience has shown that the Dairen customs house has not an effective control over the import trade, and cannot have an effective control, until Chinese customs barriers are established on the frontier of the leased territory, Kinchow, and all freight trains searched and checked. Without further dwelling on these important points it must be evident to every impartial person that though on the surface everything is now clear, beneath the surface powerful disintegrating factors exist in embryonic form or requiring prompt and careful treatment. The unfortunate clause in the original Port Arthur Agreement which permits a discussion of the question of the renewal of the lease on the expiration of the present term rises like a distant cloud on the horizon. The desire to make the Manchurian railways a permanent possession is scarcely less masked. And there are other minor points which discretion bids leave here undiscussed. If Manchuria comes through the ordeal of these many difficulties successfully, it will be simply due to the fact that Chinese dead-weight has at last assumed a more militant form and that Japan recognizes the change. For that Russia does not care to associate herself in any way with Japan in Manchuria; that she is bound in the end to fall back on her Amur railway seems unalterably plain.

Here we reach the third and last phase of this examination—the immediate Chinese task. By examining in the next section the vital points on the Chinese side we are able to understand once and for all the last limits of this vexing question.

III.

The situation being such as has been described, first from the general international standpoint and secondly from the more particular Russo-Japanese standpoint, it seems plain that if there is

one thing above all others on which Chinese efforts in Manchuria should immediately be concentrated it is on questions of finance: First, the primitive question of currency, and then the more complicated question of a general Manchurian budget which will harmonize taxation and expenditure, and oppose an effective modern system to the alien forces in the country.

In no part of the empire has currency been in such an inchoate condition as in Manchuria. For many years in certain marts there were actually no coins at all, not even copper cash, the entire business being conducted on a basis just one stage above primitive barter, a credit system which was peculiarly pernicious because it was grounded not on currency but on commodities. Conditions have been lately improved by a large importation of copper coins, subsidiary silver, and even silver dollars, but the absence of token coins is still so marked and primitive ideas show themselves still so tenacious that banks, such as the modern Bank of Communication, issue silver dollar notes promising to pay bearer not one silver dollar but ten 10-cent pieces! A region that measures its wealth in a petty subsidiary coinage, that is admittedly badly minted and debased in value, is surely deserving of the worst censure.

Were Gresham's Law an infallible law this debased currency should have swept the country clear of all sound currency, such as Japanese yen-notes and Russian roubles. But this law, although applicable in ordinary circumstances, is proved the very opposite in Manchuria, thanks to the existence of that formidable *imperium in imperio*, the Manchurian railway system, which knows no money but its own. Thus to all intents and purposes not only does the present defective Chinese currency penalize the people, but it exposes them to far greater political dangers by allowing the rapid expansion of these alien currencies which are becoming more and more highly prized because they are based on sound finance and not on makeshifts. Furthermore, so long as there is no sufficient stock of minted Chinese money in the country, neutral European banks—themselves a powerful guarantee of the open door—cannot be expected to open offices in Manchuria. Had there been in Manchuria even the relatively small circulation of silver dollars which there is in the other eighteen provinces, European banking agencies would have been opened long ago at the principal marts of Harbin, Changchun, Mukden and Newchwang. It has become

absolutely essential then that silver dollars and subsidiary coins, to the gross amount of at least two dollars per head of native population, or say forty million dollars in all, be put at once into circulation, and that the forced retirement of all the heterogeneous mass of paper money, such as tiao notes, merchants' transferable drafts, and subsidiary silver notes be forthwith ordered.

This means nothing less than that the whole of the new currency reform must be directed first of all on Manchuria, where modern methods have become for political reasons so vitally essential. A proper banking scheme must go hand in hand with mere currency reform; and in this one matter there are years of hard and conscientious work. The capital of the only two modern Chinese banks, the Ta Ching Government Bank and the Board of Communications Bank, is at present wholly insufficient even for the Manchurian provinces; that they, as at present constituted, should be expected to manage the internal finance work of an immense empire in the throes of modernization is ridiculous.

The second point which demands treatment equally urgently is the question of the complete policing, as distinguished from the mere garrisoning, of the country on a modern basis. A Manchurian mounted constabulary, of precisely the same nature as, for instance, the Canadian mounted police, or the Italian carabinieri, is urgently needed. Taking the latter illustration as a peculiarly useful comparison at the present moment, it may be mentioned that the Italian carabinieri, consisting of some 25,000 men, cleared Italy of a brigandage much older and better established than Manchurian brigandage, and speedily won that confidence in law and order which is precisely what is needed at the moment all over Manchuria. A mounted military police, distributed in chains of posts in every part of the country and centralized in the viceregal seat, Mukden, would soon secure the execution of Article II of the Chino-Japanese Treaty and thus immeasurably strengthen China's hand. A Chinese commission of study could not do better than proceed abroad, enlisting skilled technical aid in the establishment of the necessary training centers in Manchuria.

The third point, which is equally urgent if the future is properly measured, is the question of Chinese emigration to Manchuria, that is, assisted emigration. A proper government department is required which will steadily fertilize and strengthen the vast

resources of a region as extensive as France and Germany combined, by the simple method of directing a great stream of migration on to the unoccupied land from the more congested provinces. This will be the best monetary investment it is possible to find; in the modern world, as in all times, the greatest riches are industrious men, of whom China has tens of millions living on the verge of starvation. The most generous estimates give Manchuria to-day a population of only twenty millions; there is room for one hundred millions and more; and remembering that modern frontiers are formed by flesh and blood and nothing else, it will be at once apparent that every extra million of men that go into the country will increase China's strength and resisting power immeasurably.

These three points are undoubtedly the essentials which demand immediate attention: finance, police and migration. Automatically they will bring in their train that astounding progress which has marked Canada's latest years of development. But hardly less important is the need of better communications throughout the country. Vast regions are still virtually isolated save during the winter months, when the rude tracks which do service as roads are frozen over. A system of light railways, independent of the present system or of any future trunk system, is certainly needed, and in proportion as the strength of the country grows so should the means of rapid intercommunication be improved.

Likewise it should be borne in mind that in Manchuria there are few or none of the prejudices which linger in many of the older provinces, and therefore in the two great fields of agriculture and mining there is also room for instant action. In the matter of agriculture some progress had been made already in experimental work; but it is an open question whether the government should not have recourse at once to the methods adopted with success by Russia in Siberia; that is, of becoming a dealer on a large scale in agricultural machinery, and in securing the general introduction of that machinery amongst the peasantry by inaugurating a system of gradual payments for relatively high-priced articles. In Northern and Western Manchuria large model farms could be very successfully established; every one admits that. Similarly in the matter of mining it is senseless not to take the bull by the horns, and promote modern mining not by a system of concessions, which has proved so unsatisfactory in China, but by a claims system. By

making it a *sine qua non* that registration of mining companies can only be effected in Peking and that Chinese jurisdiction must be admitted in the articles of association, the beginning of a *modus vivendi* might be secured which could eventually be extended all over the empire, and lead not only to a great development of Chinese wealth, but to a great development of Chinese political strength as well. China should learn a lesson from Japan's signal failure in this field, where excessive protectionism has made the introduction of neutral capital next to impossible, and thereby directly arrested what should be in the modern world a normal and far-reaching growth. Mining in Japan is utterly unimportant compared with the development it has received in Europe and America; and unless mining becomes important in China her general industrial expansion will be directly impeded, whilst a new and profitable source of taxation will be left untapped. That a proper beginning on a modern basis should now be made in Manchuria is moreover a political necessity.

Whilst the truth of all this need not be doubted, it is now amply evident that in the last analysis, as the writer has already insisted again and again, the solution of the Manchurian question is no longer a local question, that is a question of this or that improvement, of this or that activity, but a question of pure Peking politics. That is to say, Manchuria is destined to be the infallible touchstone by which the success of the Peking Government as a modern governing instrument will be coldly measured. A plan needs now to be publicly laid down which will secure that in a single decade, before 1923, the currency, the complete system of railways, the army, will be in full working order. In the modern world the one argument that counts is the argument of readiness. Every access of strength in Peking will be automatically reflected in Manchuria; every sound move in Peking will strengthen the forces of conservation; every honest word will find its resonant echo on the banks of the Yalu as on the banks of the Amur, and tend to revive those spacious days when the decrees of a Chien Lung were not only listened to with awe from the deserts of Mongolia to the swamps of Annam, but unhesitatingly obeyed. Finished will then be those dreary times when the meticulous attention devoted to some petty question by the highest officers of the Chinese state awoke the derision not only of satirists, but of the simple-minded as well; and only in the halting

periods of some unperceptive traveler, whose footsteps had blindly guided him to a land falsely held to be steeped in unfathomable mystery, will it be possible to recover a confusing impression of vanished treaty-port and leased-territory days, with their vain talk of spheres of influence, of inalienable rights belonging to mediaevalism and only the mediaevalism. Modernization is all that is required, rapid modernization, instant modernization.

Out of chaos thus springs order, the order based on the proper development of inalienable ethnical rights. A general admission that this is so, that the curtain must be rung down on stupid days, is already growing. When everyone at last openly proclaims it, even the brain of a Moltke could not conceive of a militarism which would deny it. "There is somebody more clever than Monsieur Voltaire," said Talleyrand, "*c'est tout le monde*." It is, then, nothing more than the world's moral support that China sorely needs. May it soon be openly given!

THE OPEN DOOR

BY FREDERICK McCORMICK,
New York.

At the beginning of this century the attention of world men, by which I mean those who think in terms of nations not of pockets like the provincial, was called to the fact that as to nations, the future is to the Russians and to the Chinese. Of the two the advantages seem to favor the Chinese because of their moral solidarity, civilization, competence, and industry, which no internal or external disorder has ever been able to break down, and their extensive natural resources. The Russians hold these views, and the directors of Russia's destiny are guided by them as a vague and impressive fear.

Of the present great political doctrines of the world the foremost are the Monroe Doctrine, and the Open Door. Both are American. Unless America repudiates her place and responsibilities in the world at large, these two doctrines will dominate the politics and progress of this century, because they concern the undeveloped industrial regions of greatest potential wealth and power, and toward which mankind is turned.

Of these two doctrines the foremost is the Open Door, whose importance has been great enough to have dominated the first decade of the century. Here are a few of its influences: its principles caused the most extensive military pilgrimages of modern times—those to Peking in 1900—and a few years later were the avowed cause on Japan's part of what was in some ways the greatest war of civilization, the Russo-Japanese War. Besides causing all the wars of the decade (Open Door Decade) it became the bone of contention, dividing the great powers of the world into two strong groups, one under the leadership of Japan, the other under that of America, whose interests are apparently irreconcilable, and in this way it has created foreign affairs in their largest sense for the United States. And finally the war danger surrounding this contention over the principles of the Open Door has been the chief alarm behind the arbitration and peace movement in America

and Europe, and its complications were the direct means of bringing forward the arbitration treaties signed between America and Great Britain, and America and France, August 3, 1911, furnishing as they did, the opportunity for Great Britain by signing the treaty to remedy the evils which the Anglo-Japanese alliance had wrought in the position of Anglo-Saxons in the Pacific, the effect being to unite the British colonies with the United States in the causes of the West, and by effacing herself from the list of America's possible enemies leave the United States free to promote the principles of the Open Door. The world of international affairs has thus laid down the lines of an Open Door Era, or conflict, with America in the breach, and with problems in the solution of which there are no guiding parallels.

America's geographical and political position is midway between the theatres of these two doctrines of the Americas and Eastern Asia. America is a strong, unbroken, untried, and powerful nation of vast ideas and intense purposes. For several reasons, therefore, she is the center of the international stage of the Pacific, and one of several unknown elements of vast potentiality there, of which China is another. She has done several things to deserve this position, and the chief reason why she is the power in the breach of these Pacific questions is, that, after acquiring the Philippines and her Pacific territories in 1898 she, in 1899, established the Open Door, equal opportunity, and integrity of China doctrine among the Powers, in 1900 sent an army to Peking in its interest, in 1908¹ a battleship fleet to Eastern Asia and around the world for this purpose, and the Japanese question, and began with striking energy to open the Isthmus of Panama to let her navy and all Atlantic commerce into the Pacific—a work worthy of China that built the great wall and the grand canal—and in 1910 and 1911, with surprising diplomacy in which she challenged all the great Powers, she forged for her finance, industry, government, and national ideals, a firm place in China's industrial and political development equal with the greatest nations. And last, if she so elects, she is the "god in the car" of the future of the Pacific because she is the largest and most powerful state in the Western Hemisphere

¹ The dispatch of a division of the American Army, composed of all arms of the service and fully equipped for a campaign, was one of the most extreme acts of executive authority in the history of the United States.—JOHN W. FOSTER, *Ex-Secretary of State*.

and in the Pacific. What she is to do is a subject in the determination of which every citizen may now take a permanent interest, and most have already discovered a relation, if not along political lines, at least with respect to the question as represented by the presence of Mongolians in America and of the word in the American federal laws.

When the word Mongolian was employed in the federal laws, none imagined that it was itself to be the emblem of foreign affairs of immense magnitude for a nation whose first President warned against foreign entanglements. Those entanglements were ours at the end of what I have called the Open Door Decade (1900-1910). The United States was involved with Eastern Asia and Europe on the west (Open Door), as she is involved with Europe on the east (Monroe Doctrine). And since the greatest questions exist there, foreign affairs in their widest sense have come from Eastern Asia. Even the constitution was made in an age of darkness respecting Eastern Asia; Confucius was merely a name; the statesmen, sages, builders, artists, writers, of China and of Japan were not then known, as they are nearly unknown to-day. Since that age Eastern Asia has written its own mandate across the European tradition respecting Asia, and across some of our federal laws, the latter circumstance involving one of the problems in the Pacific, and the enlightenment respecting Eastern Asia that has now begun both in Europe and in America may be written down in the words Open Door Doctrine better than in any other form.

The Pacific question to Americans is locked up in the affairs of three countries, Japan, China, and America. Western Asia gave religion to the world. If China is the key to "the world's politics of the next five centuries," as John Hay said it was, Eastern Asia has given grand politics to the world, and Eastern Asia is China and Japan.

Japan is now a first-class Power in the Western sense, having a highly organized government with a competent military, and she is steadily increasing in enlightenment, prosperity, strength and power.

China is the nation of greatest bulk in the world, is in a state of change and progress, possesses the sinews and has the visible prospects of being a first-class Power, and furnishes not only the most important example of effort at constitutional and representative government ever attempted, but the most important attempt at reform in the history of man.

These two nations and races are America's permanent associates in the "world's politics of the next five centuries." A study of the world's politics during the awakening of China shows that in times of crisis over China a majority of Western nations, influenced by the American disseminated doctrine of the Open Door have held back in Eastern Asia, generally willing to be led by America, and this opportunity and responsibility has been permanently accepted by America in the interest first of her present trade and future commerce and peace, and second in the interest of China and all the Powers equally. American financiers entered the field of China's industrial regeneration, 1909, and now the United States has physical interests there identical with those of the greatest Powers, thus giving adequate support to the position she has taken as the advocate of the Open Door.

The natural effect upon Japan of the active material interest policy adopted by the United States in Eastern Asia, and the setting up of the Open Door principles of equal opportunity and especially that of the integrity of China's sovereignty and territory, has been to introduce along with it the influences and principles of the Monroe Doctrine upon which Japan seized and has now made a part of her policy towards the world. The Monroe Doctrine for Eastern Asia means that Western Powers are not to expect to extend their sovereignty and institutions there. This policy upon the part of Japan would exactly suit this country if it were a certainty that Japan herself was not destined to extend her own authority on the continent of Asia and thus traverse the principles of the integrity of China and the equal rights of Western Powers. The fact is that to Japan American policy introduces the principles of no extension of Western authority in Eastern Asia, because it throws into such insistent relief those facts of Japan's position on the Asian continent and her political alliances and complications with Russia and European Powers that make her an opponent of the integrity of the Chinese Empire. It cannot be disputed that for several years now a diplomatic battle has been going on between Japan and America, until recently much to Japan's advantage, which has divided the Powers interested in Eastern Asia into two camps. The superior political and diplomatic sagacity of Japan in Eastern affairs enabled her to marshal the frontier powers of China into a frontier compact. These frontier powers, Great Britain and Japan,

France and Russia, are allied offensively and defensively, while France and Japan have agreed together respecting frontier interests, Great Britain and Russia have agreed together regarding frontier interests, and finally Russia and Japan themselves reached an agreement on Chinese frontier interests July 4, 1910, the main point of which agreement is the maintenance of the *status quo* in northern China. Needless to say the "*status quo*" of Russia and Japan in north China is something which China considers to be contrary to the Portsmouth Treaty, the Ching-Komura Convention, a violation not only of treaties but of the Open Door, the integrity of China's sovereignty, and of her territorial integrity.

But with respect to influencing the great Powers in their attitudes toward China, the American policy, upon the success of Japan in getting Russia to sign with her an agreement, was thus outmaneuvered at the end of the Open Door Decade. The political forces of the Powers in Eastern Asia were then marshaled by Japan upon the side of material frontier interests, and America saw that the Open Door was becoming more of a name than anything else. It was at this juncture that the government in Washington devised a plan for marshaling the financial and capitalistic interests of the Powers in China proper and in Manchuria, and centering those interests on the policy of industrial development, persuading China of the wisdom of a liberal use of foreign capital in the development of her empire. In this way the political interests of Japan and of Russia especially, were combatted, so as to offset the tendency to territorial and jurisdictional encroachment, and as both Russia's and Japan's weaknesses were found in their several incapacities to furnish capital to China and therefore to formidably oppose this movement, this plan succeeded, and America was able to see formed in China an alliance of the interests of the four capitalistic powers already mentioned on financial and commercial lines which stand in opposition to the political interests of the frontiers. It may be said, therefore, that the Open Door Doctrine already has led the United States to undertake unusual measures, and assume unprecedented responsibilities, in the promotion and perpetuation of it in Eastern Asia. Unless China is broken up by some unexpected though not wholly impossible cataclysm her future will largely depend upon the outcome of the struggle between these forces of the frontier (or Manchurian) allies whose interests and

political action tend to disintegrate China, and the capitalistic allies whose interests tend to build up China from the center outward, and if China could have peace within might conquer the evils she has allowed to form about her frontiers. America's course for several years now has served to fasten upon her the responsibility of maintaining a foremost place in this contest, and these latest activities of 1910-1911 only leave her on the threshold of yet greater possibilities and responsibilities. What these are may be imagined by those students of Eastern affairs whose knowledge of the forces working within the Chinese race and nation equals their understanding of the necessities, aims, opportunities, and intentions of the frontier powers. That, in fact, is the Open Door question.

THE LIFE OF A GIRL IN CHINA

BY MISS LI YIENI TSAO, M. D.

Within the last thirty years, a great deal of literature has been produced on China and things Chinese. The prevailing tendency among writers is to belittle and condemn. Each writer tries to draw his own conclusion from a carefully selected set of facts ready for his manipulation. One-sided facts could very successfully hoodwink the readers who are not acquainted with other than what are furnished. However, it has been generally acknowledged that critics usually present the dark side more energetically than the bright. Recently, sociological studies have broadened the minds of men so that the attitude of one people for another has changed from one of off-hand condemnation to sympathetic interest. In depicting the life of a Chinese girl in China, the writer would neither defend the position of her country-women against the onslaught of critics, nor paint a rosy picture, but make a faithful description of the situation, with the hope that some of her readers might volunteer to furnish help in breaking down the bad religious and social customs that fetter the girls and women of China. Realizing the difficulty in ameliorating the condition of Chinese women without first locating the chief social bulwarks that have been responsible for it, it is with a deep sense of responsibility that the writer proceeds with the discussion.

Since it is not the writer's intention to prove any definite conclusion advocated, it would be well to lay down at the start certain fundamental sociological principles that have been generally acknowledged and which might likely serve to elucidate the situation.

I.—Man and woman differ, as Tennyson has it: "Woman is not man undeveloped but diverse." This is universally true.

II.—A. The society that is based upon the old, is conservative.
This is true of China.

B. The society that is based upon the young, is progressive. This is true of the West.

In China the young obeys the old, in the West the old yields to the young.

III.—A. Chinese home-life emphasizes solidarity.

B. Western home-life emphasizes individualism. The Chinese family is a co-operative community which necessitates a constant self-sacrifice. The western family is an independent unit which develops a self-reliant aggressive spirit.

IV.—In the struggle for existence, the protected becomes weak; the unprotected strong.

Space does not permit the amplification of the above statements, but a little reflection would be sufficient to convince any one of their validity as they have been universally admitted. However, in the course of description, whenever occasion arises reference will be made to them explicitly. Wherever possible, comparisons between the eastern and western life will also be used. China is now undergoing a period of transition and so many conditions have changed that one is often placed on the horns of a dilemma in giving a faithful portrayal; one is either tempted to present too much of the modern life or else of the life prior to the influence of Christianity and western culture. Inasmuch as modern ideals have only affected the coast provinces and treaty ports, it is deemed advisable to depict a Chinese girl's life which was universally true throughout China some thirty years ago.

A. Early Childhood

The advent of a *girl* in a Chinese family has rarely been an event of joy as compared with that caused by the arrival of a boy; of course this is not true of Chinese Christian homes. Aside from the economic, the chief reasons for disappointment are because a daughter cannot offer the annual ancestral sacrifice, glorify the family by official appointment through literary attainments, and perpetuate the family name. In a society where reverence for the old (II A) has become ancestral worship, the above considerations assume an alarming degree of importance.

In general, the baby girl receives the same tender care as a boy would as soon as maternal philoprogenitiveness overcomes the first impulse of disappointment as shared by friends and relatives alike. Up to the age of five or six, the child participates equally in the privileges of her brother, excepting those that would tend to make her a "Tomboy." (I). At the age of five or six, however, the line

of demarcation becomes more distinct between the boy and the girl. This landmark is the wicked and senseless custom of foot-binding, which has done much to weaken the constitution of our women and harden the natural love of mothers for their young. A pair of small feet though at first considered as a form of beauty, has, in course of time, become a mark of gentility, and therefore all families which could lay claim to a genteel ancestry would feel duty bound to cramp the toes of their girls. This custom is by no means universal, for the Manchus of the north, the Hakkas of the south, and the agricultural class in many sections of the country do not appreciate this form of "hobble" beauty.

The duty of administering this unnatural torture devolves upon the mothers who, in stamping their own flesh with the mark of gentility, have for generations gone about the task with dogged determination and oftentimes with many a bitter tear. Fond fathers have interceded in vain against this invulnerable custom which has served time and again as a cause for an unquiet house. Rare exceptions are known when both parents agree to supply their daughters with stilted shoes as a measure to defeat the practice. Generally, the mothers have forgotten their past sufferings, and feeling proud of their own small feet, apply bandages to their daughters' feet desperately. On the other hand, the child is henceforth placed in a different sphere from the boy. Cries, protests, lamed feet and a sedentary life label her as a Chinese girl.

B. Her Education

The education received by the Chinese girl before the advent of the Mission Schools and the modern school system was a negligible quantity. Kindergarten and domestic science were unknown from the modern educational standpoint; physical education was impossible on account of the bandaged feet; for even walking was too painful at the beginning. Under the old tutorial system, education had as its aim, the training of men for business or government service, and since women were not supposed to receive official positions, their education was therefore not deemed as absolutely necessary. This, however, does not imply the utter negligence of female education; for loving parents had often given their daughters the rudiments of knowledge in common with their sons under the

same family or village tutor, and sometimes even an advanced literary education was imparted to them.

Under such circumstances, the children of the ignorant and the poor are wholly neglected as a matter of course, and it is only with the advent of universal and compulsory education that this condition can be remedied. But in the upper and middle classes, girls generally go to school till the age of adolescence when it was considered improper for them to be seen constantly out of doors, so it is only in families where tutors could be afforded that their education so far as reading and writing are concerned may be prolonged. The curriculum covered coincides with what a boy generally learns up to the age of twelve or fourteen, excepting a few books which have special reference to the duties of a girl. This implies a general knowledge of reading and writing letters and some ciphering. After that time till marriage, the greater part of the time would be devoted to sewing, embroidery, cooking and general domestic art. These duties often mean an endless task in helping to furnish the household with simple articles of dress and food, such as hats, shoes, socks, shirts and preserves, pastry, etc. In households of reduced circumstances piecework in sewing, pastry, lanterns, making match-boxes, weaving baskets and the minor employment of the silk and tea industries might be carried on as a means of keeping the wolf out (III A).

C. Her Social and Moral Life

A Chinese girl has very little social life to speak of. This is also true of the boy when compared with Tom Brown at Rugby. In fact, the rigid paternalistic oversight (IV) has reduced the initiative of Chinese youths to a considerable extent. As eastern society is based upon the principle of filial piety, it has become almost a second nature to obey one's parents, elders and superiors. While obedience is a good discipline, pushed to the extreme it has a weakening effect upon the moral fibre of the young. Often times, children have to put up with unreasonable parents just because custom requires it, and any infringement would be eyed with disapprobation from all. "Well, it may not be the best, but what of that, she is after all your mother," is a phrase constantly heard addressed to a revolting child. Westerners have watched with great surprise

the meek submission with which Chinese children, and even adults, receive the reasonable and unreasonable chastisement of their parents. It is likewise a surprise for the easterners to see the western youths behave towards their parents. In the East, society is based upon the old, and in the West, upon the young; thus in the former the young has no voice while in the latter, the old is considered a back number (II A, B).

Since of children is required so much obedience, a boy's climbing, swimming and fighting instincts are curbed as far as the apron strings could reach. As girls lead a much more indoor life, constant supervision has made freedom of action almost impossible. Physical exercise beyond the most rudimentary such as is seen in the kindergartens of the West, is practically unknown. The few social enjoyments usually mean dressing up and being on behavior. The chief occasions that send a ripple of cheer and excitement through the heart of a Chinese girl would be attending a fair, a theatrical performance, a sewing circle, a birthday or a wedding. Short trips are sometimes made to gardens during the flowering seasons, to a temple for worship or to witness a religious procession. But upon all occasions she is chaperoned. To go out with young men by themselves for a walk or a ride would shock the people as much as it would a nice old French aunt. Exceptions are made to this rule of near relations and intimate friends of the family in case of parties. Judged from the western standpoint, none of the above so-called enjoyments would appeal very strongly, but to a Chinese girl she would be lucky to have one every now and then.

The moral teaching is chiefly derived from two sources, namely: from the books she has studied and from parental teachings. If she is an untutored girl then her moral ideas are acquired chiefly from moral stories or through the incidents of daily life. Chinese folk-lore is rich with anecdotes and stories, and a few of them would expound certain morals as definitely as Æsop's fables do. Religious training is often no more than a series of minor household duties connected with sacrifices to gods and ancestors. On very rare occasions, young girls come into contact with Buddhist monks at masses either said at the house or at the monastery. These monks have often proven to be men of the world, and the learned ones are able to expound the doctrines as emphasized by Buddhism in a very convincing manner. But what has Buddhism

done for Chinese womanhood? It has degraded it. As long as the numerous superstitions of this religion and others remain in the Middle Kingdom, Chinese women will never be placed upon an equal standing with men. Therefore, the first duty is to enlighten the darkened minds, and with this enlightenment, superstitions will take their natural flight. It is needless for the writer to say, that only Christianity can accomplish this tremendous task, no human power ever can.

D. Engagement and Marriage

Foot-binding is the first landmark to a girl at the age of five, the other two landmarks of greater importance are engagement and marriage at the age of twelve to fourteen and sixteen to twenty, respectively. From these, the boys also are not exempted; only such a catastrophe is with them deferred by two to four years. Marriage is a universal custom in China, and spinsters are rare.

Marriages are arranged by parents. This is most unreasonable, viewed from the western standpoint, but if we give it a little consideration, this social custom is quite rationally evolved. Be it understood, that engagements and marriages are much earlier in China, and therefore to expect a girl of twelve or fourteen to make a free choice of her own would be disastrous. Therefore, in the West a law raises the age of consent, and in the East, paternalistic assistance comes to the rescue (II A, III A. B). While it is generally acknowledged that a girl should not marry earlier than eighteen, oftentimes, due to the desire of a grandfather or a sick parent on either side, marriages are hastened. In compliance to the last wish of such a parent (II A), youths are united in their early teens, and this is made feasible by the communistic family life (III A) or else the wherewithal for self-support could not be earned by the youthful bridegroom.

With regard to what part the personal consent of the parties thus united will play, the wishes of the parents will determine. Generally they alone would decide, but sometimes an opportunity for interview between the parties might be arranged. As parents would reasonably select a party of the same station of life and pay some attention to personal appearance and temperament, the youthful parties could be reasonably expected to give a blushing consent. The chief reasons why they do not protest and show so

much insubordination as a western youth would, are first, because they are young, and second, because they never had anyone of their own choice in view. It is not Romeo and Juliet, but the story of *The Tempest* universalized. Both the boy and the girl accept the other as the first love and as soon as they are united, each is willing to go half way to meet the wishes of the other. In addition to this, the difficulty to obtain a divorce further increases the mutual desire to live peacefully together. Marriage in the West often means the removal of sentimental masks of mutual consideration; while in the East, it is the beginning of love-making.

To sum up briefly, we cannot say exactly that the children have no voice in the engagement, but as a fact they have nothing to say, being young and having no one else in view; neither can we say that marriage is not sacred, for only the first wife enjoys the full privileges of a wedding ceremony and this binding tie is very difficult to annul; nor can we say there is no love, although no party ever openly admits it. Even foreign critics say that love does exist only in a manner that is to be taken for granted.

E. Her Married Life

The married life of a Chinese girl is doublefold, namely: her relation to her husband and to his family. She is married to the family (II A), more than to her husband, as he is often so young that he is merely a student or an apprentice. The bride is received into the family as an additional child to be trained in the duties of life. She is indeed no mistress in the house. Why should she and how could she be? The relation of a wilful bride and an unreasonable mother-in-law can assume all the critical degrees of such strained relations. But if the girl knows her duties as a daughter-in-law and fully realizes as most girls do, that she is merely on the par with her junior husband in his father's home, then things can proceed smoothly (II A). In a country where marriage is so early and education so limited among girls, to give control of the household to the inexperienced brides would wreck many a home.

This paternalistic and sometimes galling supervision is only reduced when the son becomes a self-supporting man or when the bride becomes mother to a son. It is motherhood and not wifehood that increases the privileges of independence in China. Wives are given to sons by parents that they may have an additional junior to

serve them. The old people expect service from the young who in turn may expect the same from their juniors later on, but not while seniors are still living in the same household—in a word, family solidarity rests upon obedience and service to the elders (III A). In contrast to this, we find in the West later marriages by personal choice, while the parents resign themselves to a lonesome old age, alleviated only by an occasional visit from their children and grandchildren (III). Communistic family life oppresses the young wife and individualistic life sends the old widowed mother to a boarding house or a home.

Another phase of a woman's life which may possibly fall upon her is widowhood. There is no greater calamity which can befall a Chinese woman than that of early widowhood. Of the four great virtues, patriotism, filial piety, fidelity and righteousness, to which monuments are erected all over the land, fidelity of women is the most commemorated. The moral reasons for this custom are not far to seek, but the practice of it is the most pitiful. Widows that have children and are in good circumstances would never think of remarrying, but the pitiful aspect is the struggle of poor widows practising fidelity.

F. Motherhood and Old Age

In the East, motherhood is the crowning period of her life in spite of cares for the young and worries over household affairs (II A, B). Old age is a continuation of motherhood, then she rules supreme in the family in the absence of her husband. Her past sufferings, experiences and maternal cares combine to make her a matron obeyed by her children and respected in the community.

In conclusion, a Chinese girl's life has none of the privileges and pleasures of her western sister. She has less education and social knowledge, but she is taught to be filial and self-sacrificing. This paternalistic policy assures her of marriage and she is not expected to earn her own living. The western sister is better educated and more independent, but she is expected to take care of herself.

Communistic life is conservative and weak as compared with the individualistic (III A), but progress has been bought with the trying struggles of self-supporting girls and bachelor maids. No doubt, with the coming of more universal education and better

economic life in China, the individual will be raised. Already, among the rising generation, constant rebellions of children against parental authority in early engagement and marriage are heard of (II A, B). Truly, the problem of the Chinese girl is a great one and nothing will solve it except that which will raise the standard of womanhood. Education alone does not accomplish it, for go back to the days when Rome and Babylon and Egypt were in the height of their education; what was the condition of womanhood in those days? It was demoralized beyond words. Therefore, the only solution to this tremendous problem is the widespreading of Christianity and Christian education. If the readers of this short and incomplete article could only go with the writer, first to a non-Christian home and then to a Christian home in China, even the most bigoted could see the difference and also find the factor which brings about this change—for to be a Christian in China is to live as one.

A WEDDING IN SOUTH CHINA

BY MISS YING-MEI CHUN,

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A wedding in South China is characterized by gay and noisy parades, and big and elaborate feasts. It is more attractive and expressive of merriment than an American wedding, but is less solemn and almost too trivial to mark the turning point of the history of two lives. There is no occasion, unless it is New Year, in China which gives a greater pleasure to youths and children than a wedding. There is nothing which grown people as well as children so thoroughly enjoy. Every person in town may enjoy seeing the parades and every friend or relative, no matter how distant, is invited to participate in the feasts which are prepared at the wedding.

Since a wedding is such an elaborate affair, it is not confined to one day. The ceremonies begin at least ten days before the actual marriage. They begin with what is called in the Cantonese dialect "The passing of the big parade." This "passing of the big parade" is a gift made by the bridegroom's parents to the bride's family. Unlike the gift which is either delivered by the postman or expressman, it is one that is carried in trays measuring three feet by six by twenty or thirty men dressed in festive costume. The gift consists largely of eatables, such as cakes, candies, nuts, ham, both cooked and live geese, chickens and ducks. Besides the eatables there are two or three articles which are meant especially for the bride. They are ornaments for the hair and a small sum of money. The bride's family accepts almost everything in the trays. In order to show their gratitude and appreciation they send back in the trays their good wishes, which are expressed in small red packages of money and also baked pigs, which are a sign of prosperity. As both families are unable to consume all the eatables on hand, they distribute them among their friends and relatives.

While they are making this distribution they take the occasion to invite the wedding guests. From the time the invitations are issued to the wedding day the two families are busily engaged in

completing their preparations. In a tactful manner the mother of the bride first announces the marriage to her daughter. Immediately the girl runs to her room to hide and weep, as a sign of her deep sorrow at having to leave her home. She refuses to appear^{at} meals or come out to see anybody. During this time her intimate friends and companions come to stay with her and cheer her up. Since the marriage has been announced, nothing needs to be kept secret. The mother openly packs the trunks and puts in them articles which her daughter has expressed her desire for. She employs tailors to make her daughter's dresses and bed clothes; packers to fasten the furniture together; and decorators to decorate and arrange the trunks, bureaus, chairs, tables, cooking utensils and other things, so that they may look attractive in the parade. Three days before the wedding these articles are removed by men in festive costume to the house of the bridegroom. While the bride's mother is preparing the trousseau the bridegroom's parents are vacating several rooms where they may place the furniture of their daughter-in-law. As soon as the furniture arrives, they put it in place and the house is ready for wedding feasts and guests.

On the third day, that is, the wedding day, a long procession composed of lanterns, bands, flags, clowns and a gilded sedan chair, reaches the door of the bride at the time set by the augur. This arrival of the procession means that the bride is to be taken away from her parents' home. The two Chinese words, one used for the marriage of a man and the other for the marriage of a woman, are very descriptive of a Chinese marriage. The word for the marriage of a man is "take," that is, to take possession of some one or to take some one to his home. The word applying to the marriage of a woman is "cross over the door." The procession comes to take some one who is to cross the door or come out of her home.

The bride never intends to leave her home as soon as the procession arrives. She lingers until night assures the mother that it is unwise for her daughter to tarry any longer. She pleads at the door of her daughter's room for admittance. When she fails in her attempt, she, with the help of the servants, forces the door open. Finally the daughter and her companions give up resisting and she herself permits the servants to dress her. After she is properly covered with red, the color of the wedding garment, from head to foot, she is brought out to the parlor, where she listens to

the prayers of an augur employed for the occasion, and where she bows before the household gods, ancestral tablets and her parents, to bid them farewell. Although the wedding is represented as very gay and happy, this moment of separation is almost too sad for the friends and relatives to bear. It is evident that the merrymaking pertains mostly to the family that is to receive the bride and not the family that is to part with her. After the parting ceremony the girl is taken to the gilded sedan chair. Amid the noise of fire-crackers and inharmonious music the procession moves on. It is customary for the younger brothers to accompany their sister to her destination and then return to report her safe arrival.

While the groom's family are drinking and feasting the parade arrives. The groom comes out and knocks at the door of the sedan chair with his fan. He makes a bow to the chair and one to each of the bride's brothers. After having done so, he returns to the house. By this time the door of the sedan chair is open and the bride is taken into the house. Both the bride and groom kneel before the ancestral tablets and household gods and pay their honors to the aged relatives. After this the bride is taken to her room, where she awaits the groom to lift her veil. After the veil is taken off she puts on a beautiful court robe and a pearly crown.

She is ready to appear before the relatives and friends of her husband. She, with the assistance of her servants, bows before the guests and serves them tea. Each guest in return for this kind favor hands over to her a gift in money. The amount varies according to the ability of the donor and his relation to the family.

After feasting, and as a means of amusing themselves, the guests play jokes mercilessly upon the newly married couple, especially the bride. They make the bashful bride guess conundrums, puzzles, do tricks which belong only to magicians, and answer embarrassing questions. Should she fail or refuse to do anything that is asked of her, she is subject to a forfeit either in money or in kind. Such merriment and joking last all night.

On the morning of the third day after marriage the bride makes her parents a visit. The evening of that same day the groom pays his first respects to his father-in-law and mother-in-law. In his honor the parents-in-law give him a feast. After the feast is over he returns home. This formal ceremony of the third day marks the close of the wedding festivities.

CAUSES OF CHINESE EMIGRATION

BY PYAU LING,
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Chinese emigration is a movement of the most singular character. It is one which differs in purpose from emigration from European countries. Europeans come to America because of a surplus of population which depresses wages and drives the ambitious to better their economic conditions or to secure a greater degree of personal freedom. Apparently the same conditions lie back of Chinese emigration. In China the land is truly thickly peopled and the economic condition wretched. Still we cannot safely say that the Chinese emigrate entirely for these two purposes. Europeans may leave their abodes for political freedom or for religious tolerance. The Chinese do not. The Chinese government is indeed despotic at the top, but it is democratic at the bottom. Religious persecutions, such as Catholics against Protestants and churchmen against dissenters which have been so prevalent in Europe, are entirely unknown in China. There are other factors which make Chinese emigration peculiar. Europeans come from all parts of the country; the Chinese come from certain parts only. Europeans go everywhere; the Chinese go somewhere only. Europeans come to teach, to trade, to work and to till the soil; the Chinese primarily come to labor, although trading is a later result. With Europeans, no matter male or female, old or young, they all come; with the Chinese only the young men emigrate. Europeans intend to settle permanently; the Chinese intend to go back. Europeans become citizens and are assimilated into American citizenship; the Chinese do not care for naturalization, nor for the native customs, manners and dress. Europeans go to places where they can find the greatest fortune; the Chinese crowd to countries where they can find the greatest number of friends and relatives. Europeans emigrate to countries where they are most favored; the Chinese persist in landing where they are opposed by legislation and public opinion. With Europeans only the most favored class come; with the Chinese only the least favored classes come.

Chinese emigration has peculiar territorial limits not only in

its destination but in its source. It is chiefly composed of young peasants coming from only six prefectures of the two southeastern provinces, Fookien and Kwantung, lying between Foochow and Canton. These adventurous emigrants have for centuries penetrated through the Indian archipelago, have pushed through the Indian Ocean to Ceylon and Arabia, have reclaimed Formosa and Hainan, have established a remarkable trade with Cochin China, Cambodia and Siam and have introduced useful arts into Java, the Philippines and the Malay Peninsula. To-day they venture southward to Australia and far westward to Peru, Mexico, Canada, Cuba, and America in spite of the stringent laws those uncourteous countries have adopted to exclude them.

When we think of the peculiarities surrounding this emigration, we cannot help believing that there are certain local characteristics which make Kwangtung and Fookien differ from the other provinces of the empire. The inborn independent idea, the seafaring spirit, the early contact with western nations, the stress of war, the "Golden Romance," the traveling facilities, the social prejudice at home and the attachment to kindred—all these are factors that are laboring to make the Cantonese and Fookienese a migratory people.

Still while we are pointing out the reasons why the other provincials would not emigrate and why only the Cantonese and Fookienese emigrate, we cannot deny that the density of population in these provinces has an important influence. It is a world-known fact that China is overpopulated. Comparing the area and population of the Chinese empire and America, we find that in territory China is just about as large as the United States. But her population is five times as great. In China every square mile supports a hundred people, but in America twenty only, one-fifth as many. The mild climate of Southern China also encourages the increase of population. So Canton, one of the treaty ports, has an enormous population which, by the census of 1899, was 2,500,000,—compared with that of the northern cities, we find that this is more than thrice that of Hankow (709,000) or four times that of Shanghai (615,000), the great commercial center at the mouth of the Yangtse River. Much has been written by travelers about people living in boats on the Pearl River and about growing potatoes in the kitchens. Both these facts, though more or less exaggerated, show that the southeastern provinces are densely inhabited.

Aside from rapid multiplication, another influence impelling the people to emigrate is the peculiar family tradition which entitles the eldest son of the family to occupy the ancestral house. Suppose a man has five sons, which is not uncommon in Canton; his eldest son will have the house. The other four sons have each to build themselves a house. Again supposing these five sons each has a family of five children, how can these children, the land in Canton being so dear and labor so cheap, manage to house themselves? Generally they cannot, and emigration is the result.

If China is overpopulated, why do not the people of other provinces emigrate? Because China is not a migratory nation. The Chinese are home loving; the Middle Kingdom is to them the center of civilization and all the surrounding countries are savage nations, nations where there is little to gain but much to lose. Until the present time the outside world has been a chaos of mystery, unknown and forbidding to the Chinese. Not only would the respectable people not voluntarily go outside the limits of the Celestial Empire, but even the desperate convicts and exiles dreaded banishment to these distant lands. It is in democratic Canton that every man is considered the equal of every other man and all countries worthy of consideration. Even there the well-to-do do not emigrate. Students and merchants who can afford to stay, consequently stay. Conventional ideas, of course, keep the women at home. It is the wretched economic condition that has driven the young peasants out.

What is this economic condition then? The emigrants are almost exclusively peasants. At home they till their own soil and support their own families. Their income is little, but their families are enormous. When the harvest is good, they get barely sufficient to satisfy their hunger. In time of droughts which often occur in winter in the southeastern provinces, they suffer from the failure of crops. We have also to remember that it is the well-to-do peasants that have their own land to till. Those that have no land, labor for those that have. The misery of these laboring peasants in times when food is scarce we need not picture. When they are out of work, they seek to cut wood in the hills. By this new occupation they can obtain only enough to meet the demand of their home and an extra meal, the reward of the whole day's labor being twenty or thirty cents. But hills are soon deforested and their

families are constantly threatened with starvation. Naturally these able-bodied, young peasants aspire for something greater, something by which they can better their own economic conditions and secure the ease and comfort of life. At home such excellent opportunities are lacking. They have to seek them abroad.

But the economic condition like overpopulation, though having a good deal to do with emigration, cannot be said to be the sole cause. This is shown by the fact that in the north the provinces along the Yellow River are often not less disturbed by floods than are Kwangtung and Fookien by droughts. The great plague that ravaged the North last spring is one of the calamities that often befall those provinces and drive many to starvation and untimely graves. Yet the Northerners do not come out, not entirely because they are less ambitious, but because China is primarily not a migratory country. The emigration of the Cantonese and Fookienese can be accounted for only by the peculiar local characteristics of those two provinces.

A marked characteristic of the people of Kwangtung and Fookien is their independent, adventurous and unbending spirit. The independent spirit of the Cantonese for instance, has long been fostered by the independence of their province which despised submission to the Son of Heaven and which did not join the Celestial Empire till the Ming Dynasty about three hundred years ago. This unruly spirit their northern neighbors designate as "savageness," and they call the Cantonese tauntingly "the southern savages." Whether savage or not, Kwangtung preferred independence to servile submission to the despotic rule of the central government and homage which their northern neighbors take pride in as a sign of civilization. The tribute, however, they did not fail to send to the throne even during the turbulent time of anarchism at the latter part of the Tong Dynasty (907 to 959 A. D.), when the other provinces revolted against the government. So Kwangtung always preserves its individuality. What the northern provinces did, it would not do; what the northern provinces would not do, it did. This deep-rooted independent spirit no emperor could extirpate. Even the powerful Chen Chi Wong, who had in 249 B. C., brought the Six Feudal Kingdoms to subjugation, did not know what to do with Kwangtung. The expedition he sent there met with firm resistance. Half was starved and half slain. The emperors of the Sung

Dynasty (960 to 1279 A. D.), instead of requiring the servile homage from the Cantonese, sought to curry their favor. They built a wall for them against the depredations of Cochin China. This independent spirit is what the Northerners lack, is what the Northerners envy. It is, therefore, no wonder that, while their northern countrymen were bound by the idea of absolute seclusion, the people of Kwangtung and Fookien, on the other hand, traversed the South China Sea and crossed the Pacific Ocean to Hawaii and America.

Their adventurous spirit has been fostered by their distant commercial enterprises. Their early commercial history showed considerable trade with the Romans. During the period of luxury Rome stood in want of silk, and silk came only from China. We can trace this as far back as the time of Virgil and Pliny. Virgil spoke of the soft wool obtained from the trees of the Seres or Chinese. Pliny, on the other hand, condemned the useless voyages made merely for that luxurious stuff. Smarkand and Bokhara were in these days the emporiums between the West and the East. Caravans traveled through the desert of Gobi till they reached the north-western province of Shensi. This route would have led the north-western provincials to trade with the Westerners, if it was not cut short by the Tartar robbers who constantly pillaged the loaded caravans. A more expeditious way was pursued, which was destined to confine the commerce entirely to Canton. The merchants took their ships from that port to Ceylon, where they sold their goods to the Persian merchants who crowded thither.

During the Mohammedan ascendancy the Arabs penetrated the dreary deserts into China and established considerable trade in Canton, at that time known as Kanfu, literally the Cantonese Prefecture. From the "Voyages of the Two Arabian Travelers," we learn that Chinese junks loaded in Siraf for Maskat, thence for India and Kau-cammali. Having watered at Kau-cammali, they entered the Sea of Harkand and touched at Lajabalus whence they sailed for Kalaba. Thence they steered for Betuma and Senef. Having gotten through the gates of China, they waited for the flood tide to go to the fresh water gulf where they dropped their final anchor at Canton. This trade like the Roman trade was entirely confined to the southern port of Canton. So was the trade with the Indies.

The Indian archipelago has always offered a field to the Chinese trade. Even in the Han Dynasty (202 B. C. to 220 A. D.), many

Chinese junks laden with emigrants sailed southward in quest of fortune. They went as far as Arabia, traded with Ceylon and Malacca and penetrated Borneo. As they had touched Archeen, they might have ventured to West Africa, if their junks had been adapted to such voyages.

The Manchu inroads also forced many a Cantonese to leave his abode for the Straits Settlements. The Fookienese likewise preferred shipwreck and death to an ignominious subjection to the Manchus. Able-bodied, young men from the eastern parts of Canton (Chaouchoofoo) and the southern districts of Fookien, Tunggau, Tseueuchoo and Changchoo sailed in large numbers for the islands of the Indian archipelago.

This adventurous spirit was rendered unbending by the many struggles and difficulties they encountered, when they came into contact with the Western explorers. These haughty explorers, after their success in maritime discoveries in the sixteenth century, had rude ideas about the civilization of the colossal empire. Because China was peaceful, they thought they had found an easy prey—all their early acts being marked by bloodshed and violence. In 1520 the marauding Portuguese violated the family sanctuary of the Ningpo people. In 1543 the Spaniards occupied the Philippines and massacred the Cantonese traders. In 1622 the Dutch seized the Pescadores and erected fortifications there; this led to an incessant war of twenty-eight years with the Cantonese in Formosa. In 1635 the British fleet attacked the Bogue Fort of Canton. All these events led the Manchu government to stringent measures, resulting in the closing of all ports against the Westerners, confining the trade to Canton only. This gave the Cantonese the opportunity of dealing with these aggressive Westerners who were to them less mysterious than to their northern neighbors. Gradually it came to their knowledge that there was still land beyond the Four Seas and that there were countries rich in opportunities and fortune besides the Indies; when the great demand for labor in America arose, they flocked over the Pacific into the promised land.

Other occurrences were destined to make the emigration inevitable. First, the stress of war. At the end of the Ming Dynasty (1368 to 1644 A. D.), China was thrown into a chaos. The whole empire was at the mercy of dynastic aspirants and marauding soldiers. Other disasters naturally resulted from the war. The

Manchus came in. Their ruthless spirit was such as, to quote the phrase of a celebrated Chinese historian, "to make a patriot's hair stand on the end." Thousands and thousands were put to the sword. Cities were sacked and looted. The Manchurian invaders spread terror everywhere they went. The most unfortunate province was Kwangtung, where the survivors of the Ming Dynasty took refuge. Every means was employed to extirpate the royal family, so every means was employed to destroy the place of refuge. A traveler who visits Southern China can still see the great wastes which were formerly sites of flourishing towns and villages. Not only this, adventurous Canton could not enjoy a quiet day. The aggressive Westerners, who were disgusted with the haughty manner of the Manchu officials, not infrequently sent their cannon balls against the Bogue Fort and marched upon Canton. Twice did Canton enormously suffer from the Opium Wars. The British soldiers marched to the Viceroy's Yamen, causing consternation among the people. The Taiping Rebellion, which had its origin in Kwangsi, did not spare the cities of its neighboring province, the houses of which were as much robbed and destroyed as those of the northern provinces.

At the time of these disasters, there were also certain attractions to quicken the emigrating movement. The sugar plantation in Cuba, the demand of labor in Mexico, Canada, and Peru for other economic purposes, and especially the discovery of gold in California had stirred the whole world with hopes of unexpected fortune. The call of the Gold Mountains, the name given by the Chinese laborers to the Californian ranges, was ringing in the air of the distressed regions of Canton. To go over there and dig the gold up was the thirsty desire of the poor sufferers. "To be starved and to be buried in the sea are the same," said some young adventurers. "Why not plunge right into death rather than wait for death!" With this spirit they even embarked in their crude, old junks and combatted with the dangerous element of the sea without any fear or the least idea of receding. They sailed in these days directly for California before reaching Hawaii. Those who had made their fortune returned and spread the news of the "Golden Romance." The public spirit was stirred. Thousands and thousands forsook their homes.

We must also not forget the traveling facilities which the foreign

agents in Hongkong and Macao afforded to the Chinese laborers. Placards were posted on every street wall, narrating the charming news of getting fortune quick and the attractive facilities of going to these wonderful lands. Every able-bodied man, no matter whether he could afford the passage money or not, was induced to emigrate, if he could borrow the money to go. Those who could not pay for the passage readily received the most cordial assistance from the agents. A certain amount of money was advanced to the family. A certain amount was paid for clothing and other traveling equipments. What the employers needed was labor, labor of any sort. Nothing would interfere with the Chinese custom, dress and manners. Emigrants need not necessarily know the foreign languages. They need only to work and get good pay. So farmers laid down their spades, carpenters put aside their chisels, and wood-cutters said good-bye to their old companions, the axe and the pipe.

Among the classes of peasantry who emigrate, there are in some parts of Canton another class, the class of semi-slaves, who run errands for the villagers and receive pay for their services. In form they are entirely independent. But, nevertheless, they cannot enjoy certain social privileges which the common people can. In spite of the social prejudice, this class has grown to be very intelligent and prominent. This also aroused the prejudices of the ignorant against them the more. Naturally in accord with the independent spirit of the Cantonese, they prefer to die abroad where they can enjoy freedom than to endure the social prejudice at home. Liberty, above all, is the star that guides these people to America.

Having taken a comprehensive view of the causes of emigration—the stress of war, the gold attraction, the traveling facilities and social prejudice at home,—which render an unmigratory nation migratory, it is easy to see why the Chinese laborers come to America. But aside from all these there is still another cause that accounts for the non-emigration to Europe. That is the Chinese sense of family attachment. To make clear what I mean, I may say that the Chinese stick to their friends and relatives. Where their friends and relatives go, there they go. Where their friends and relatives do not go, there they do not go. Formerly they flocked to the Straits Settlements only, and not a single one came to America, nay, not even by the gold attraction or any means of inducement. But as soon as a beginning was made, the adventurous

emigrant was soon followed by his friends and relatives. That is why, notwithstanding, only three Chinese emigrants appeared in San Francisco in 1830, by 1857, only forty-five years later, we find quite a large settlement in that city. From three, the immigration had changed to eighteen thousand, twenty-one, an increase wonderfully rapid when compared with that long period between American independence and 1830, when not a single Chinese stepped on American soil. Since the passage of the exclusion laws, of course the number of Chinese entering the United States has been curtailed, but the inducement to come has not stopped. In fact as the unfavorable conditions in China have not changed, the attractiveness of America to the Chinese emigrant still increases. High wages, higher by far than were obtainable in the old mining camp days continue to beckon him eastward. When such attractions are present, it is hardly to be expected that the Chinese laborers will look with respect upon an exclusion law which contradicts with their interests and seems to them an affront to their race. So I dare to predict, no matter how stringent the exclusion law is, it cannot keep these zealous men off, and I should add that it is useless to keep them off. I may also say that no matter how much less promising the economic opportunity of Europe may be, if these laborers have once set foot on that continent and become accustomed to living there as they have in America, there is sure to be a constant emigration thence as remarkable as is the present neglect of that field by the Chinese emigrants.

CHINA'S METHOD OF REVISING HER EDUCATIONAL SYSTEM

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In order to appreciate fully the magnitude of the task undertaken by China, and to get some adequate idea of the difficulties to be overcome, it is necessary to sketch in outline the old educational system as it existed before the reform movement began to make itself felt.

The first thing to be borne in mind is that, strictly speaking, originally there were no government schools in the Chinese Empire. With the exception of a few schools for Banner men, the clan of the reigning Manchu Dynasty, in Peking, education was left to private enterprise. The part played by the government in the educational system was the establishment of a series of examinations, corresponding in many ways to what we speak of as civil service competitive examinations. One of the chief aims of the private schools throughout the empire was to train up scholars who could pass these examinations successfully, and thus render themselves eligible for service in the government. The examinations had the effect of setting the standard of the educational system, and thus the same subjects and for the most part the same books were used in all the schools.

Any one could set up as a school teacher, and a great many scholars who had attained the first degree in the government examinations and a host of others who had tried and failed made this their chief means of obtaining a living. The scholars in the school paid small fees, and the life of a teacher was both penurious and laborious.

The course of study pursued in all schools was divided into three grades. First came the committing to memory the canonical books¹ and the learning to write characters. Then followed the period when the textbooks were explained to the pupils and they received their first lessons in the art of composition. Lastly, they

¹ The Four Books and the Five Classics.

were taught to read more widely, especially collections of essays of successful scholars, and to write the sort of essay and poem which they would be required to compose at a government examination. Many of the pupils never advanced beyond the first or second stage, but those ambitious of going up to the examinations were bound to take the whole course. The result was to turn out young men thoroughly versed in the Confucian ethics, Mencian politics, and the history of China, with ability to write an elegant literary style, and to compose stiff and stereotyped verses.

The government examination system began as far back as the Tang Dynasty (618 A.D.) and has been continued ever since. Altogether there were four examinations.

The first were held in district cities, annually. About one per cent of the candidates who came up were successful. They were awarded the degree of *Siu Tsai* (Budding Talent) equivalent in some ways to our B.A. degree, but not signifying at all the general range of knowledge possessed by a graduate of an American college.

The second were held in provincial capitals, triennially. These were much severer tests. The candidates were immured in the little cells of the examination halls for three periods of three days each, and were put to a strain both physically and mentally which was an ordeal which few could pass through successfully. Here again the percentage of those who won the degree was low, only about one out of a hundred gaining the coveted degree of *Chü-jên* (Deserving of Promotion). Bearing in mind what we have said in regard to the first degree, we may compare the "*Chü-jên*" to the M.A. degree of the American university.

The third examinations were held in Peking triennially. Those who had secured the second degree were eligible, and if they could pass the third test were rewarded with the degree of *Chin-shih* (Fit for Office), corresponding in a way with our Ph.D. Two of the three examinations in this test were held in the presence of the emperor himself. The highest of the successful candidates were drafted off into government service, or were admitted into the College of the Hanlin (The Forest of Pencils). The position of the Hanlins corresponded to a certain extent to that of Fellows of an English university.

From this brief outline it will be seen that the whole system was intended to train men for public service. The conception of

knowledge as a thing to be pursued for its own sake was overshadowed. The possibility of rising to be influential officials stirred the ambitions of a large number of the youth of the country, and led them to submit to the long process of intellectual training necessary to reach the goal.

Frequently the Chinese are referred to as an educated people. The statement is somewhat misleading. It would be fair to say that the Chinese hold education in high esteem, and that they look up to the scholar with great respect and reverence, but the system which has prevailed for all these centuries has only resulted in giving education to the chosen few. Among the poorer people there is a large amount of illiteracy. A fair estimate would be that only one in twenty of the male sex can read understandingly. The education of girls has been almost entirely neglected except among the richer people, and a woman who can read intelligently is regarded as a very rare phenomenon. Among artisans and small shopkeepers the amount of education possessed is only sufficient to enable them to read a few characters and to keep accounts. Even a knowledge of the characters sufficient for the reading of newspapers has not been acquired by the vast majority.

The inadequate system of education left the masses in appalling ignorance. This helps us to understand China's former conservatism and opposition to progress.

Having placed this picture before our minds, we will now proceed to describe the successive steps in the reform of the educational system.

The desire for reform manifested itself first in regard to the course of studies pursued by the scholars. Contact with Western nations opened the eyes of the Chinese to the fact that those who aspired to be the future officials of the empire needed other knowledge besides an acquaintance with the canonical books of China, and something more than the ability to write eight legged essays and stilted verses.

After the war with France (1884-1885) we note among the principal reforms then instituted that mathematics was introduced into the government examinations, and the attempt was made in this way to broaden the curriculum. Owing to the fact that the literary chancellors who presided over the examinations were themselves entirely ignorant of the new subject, very little, however, was

accomplished in the way of modifying the old stereotyped classical examinations.

In 1872 a detachment of Chinese Government students was sent to the United States under the direction of Dr. Yung Wing. It was intended that they should receive a thorough education in American schools and colleges, and upon their return to China be instrumental in the introduction of reforms and of an enlightened system of education. Unfortunately the experiment was never carried out to completion, as all the young men were recalled just as they had reached the stage where they were ready to enter college.

The next step in the reform of the educational system was in connection with the reforms instituted by the late Emperor Kwang Hsu in 1898. The young emperor was eager to abolish as far as possible the old classical examinations, and a decree was promulgated that henceforth those competing for degrees were to have "a knowledge of ancient and modern history, information in regard to the present-day state of affairs, with special reference to the governments and institutions of the countries of the five great continents, and a knowledge of the arts and sciences thereof."

It will be noticed that both in the proposals of 1885 and of 1898 nothing was said about the establishment of schools throughout the empire. The chief emphasis was laid upon the modification of the examination system in the direction of making it less antiquated.

Certain special schools, such as military and naval academies and some government colleges were established, but no steps were taken toward founding a government system of schools graded from the primary up to the university.² This did not take place until after the period of reaction which resulted in the terrible upheaval of 1900.

After the central government had been re-established in Peking the late empress dowager went over to the side of reform, and advocated the measures to which she had been so bitterly opposed before the Boxer outbreak.

A board of education was established in Peking in 1905, and an edict was issued abolishing the ancient system of government examinations. Largely under the direction of two high officials,

² It should be noted that the only schools in the Chinese Empire up to a recent period giving a liberal education were those established by missionaries. The missionaries may justly claim to be the pioneers in the introduction of an enlightened system of education.

Sun Chia-nai and Chang Chih-tung, a comprehensive scheme was worked out "which included the establishment of a central university in Peking, affiliated colleges, technical and normal schools in each provincial capital, high schools in each prefectural city, and primary schools in each departmental city and village."

The whole scheme, including regulations as to discipline, curricula, suggestions as to the method of establishing schools, etc., was carefully drawn up in a memorial submitted to the throne by H. E. Chang Chih-tung. When printed, it consisted of five volumes. The memorial was immediately approved, and the carrying out of the scheme was authorized by imperial edict.

This may be considered the beginning of the introduction of a national system of schools into the empire.

A careful perusal of these volumes shows that the memorialist was largely influenced by Japanese methods, and accounts for the similarity between the Chinese and Japanese systems of education.

The grading of schools is as follows:

- I. The kindergarten and primary schools.
- II. The first grade elementary school.
- III. The high grade elementary school.
- IV. The middle school.
- V. The high school.
- VI. The university.

The nomenclature is somewhat different from that to which we are accustomed. The middle school corresponds very closely to our grammar school, and the high school to the German gymnasium and the first years of the American college. The university follows the German idea and consists of eight special faculties.

In addition to the above general course of education, technical schools have also been established, some of them being included under the heading of middle or high schools, and others as being departments of a university. Provision was also made for normal schools.

In compiling the course of study, the attempt was made to provide for thorough instruction in the classical and historical literature of China, "thus enabling the new system of education to attach itself without too great a wrench to the earlier system which centered around civil service examinations." This, of course, made it necessary for the student to devote a good many hours of study

to his own language and literature. To carry this burden in addition to acquiring the new Western learning overloads the student and is apt to result in superficiality. The problem of how to combine the new with the old is probably the greatest which the Chinese educator has to face. The system already adopted is probably more or less tentative, but if in drawing up the new schedule of studies no provision for the old learning had been made, the whole scheme would have been regarded as too revolutionary and would probably have failed to find favor in the eyes of the government.

Another feature in connection with the curricula adopted in the schools is the emphasis laid on ethical teaching. The Chinese have always entertained the idea that knowledge and morality are closely associated. The old system of training was intended to produce "the princely man," one who possessed intelligence but at the same time a perfectly rounded moral nature. The scholar of China in the past has been fond of expounding ethical principles and has posed as their embodiment. Too often it has been a case of *video meliora proboque, deteriora sequor*.

Real alarm has been felt lest the introduction of Western learning and a knowledge of the natural sciences would undermine the ethical principles upon which Chinese society is based, and consequently in the courses of study drawn up an important place has been given to moral culture.

The system having been settled, the question arose as to the best way of putting it into operation. It was an undertaking of tremendous proportions, nothing less than providing schooling for some 40,000,000 boys and girls. As we have already indicated, everything had previously been left to private initiative, and the schools which existed were all the result of private enterprise. The government issues the edict "let there be these new schools," and it becomes the duty of officials and people to see that the mandate is carried out.

There never had been in China anything corresponding to school rates, and no provision had ever been made for assigning a part of the government revenue to educational purposes.

In the provincial governments the same was true, no regular allocation of a portion of the provincial revenue had ever been made to education.

The task of carrying out the will of the central government was

laid upon the shoulders of the provincial authorities. The viceroys and governors had to assume this duty, and funds were secured in the following way: Some schools were founded by the officials themselves, who squeezed the money needed out of the provincial revenue, other schools were founded by money obtained from the people as contributions for this purpose. Still other schools were founded as acts of merit by wealthy gentlemen, who in return for this public service were rewarded by receiving some official rank,—the right to wear the blue or red button.

As may be imagined, schools established in this way have had a somewhat precarious existence. The officials finding the cost more than they anticipated, have tried to curtail the expenditure, and the contributions from the people have sometimes not been forthcoming. Up to the present time, as will be seen later on when we quote statistics, very inadequate provision has been made for the education of the whole nation.

At the beginning of the reform, as was perhaps natural for those inexperienced in educational matters, the chief aim was to provide the schools of higher grade, and primary education was neglected. The government was in haste to produce the new scholar and seemed to think he could be manufactured in a short space of time. It was hoped that in this way the teachers for the primary school could be obtained. It soon became apparent, however, that the attempt to introduce the new education from the top was an impracticable one, and the need of establishing a large number of primary schools was realized. Recently more effort has been expended in this direction.

Another difficulty in the introduction of the new schools into China was in connection with securing qualified teachers. At first it was thought that the supply could be obtained by sending young men to study for a year or two in Japan. As many as twenty-five thousand young men, representative of the best type of learning under the old system, entered the schools of Japan, hoping to take a short cut to a knowledge of Western science. For a time a wave of enthusiasm swept over the country, and Japan was looked upon as the Mecca for those seeking enlightenment. In a short time, however, a reaction took place, and the Chinese became convinced that there was no royal road to learning, and that there must be the same patient toilsome labor as was required in the old system.

The normal schools established in China have proved for the most part unsatisfactory, and the reason is not far to seek. The young men who have attended them never had the mental training in primary and elementary schools essential as a basis for more advanced work. A large number of subjects were taught in a superficial manner, and the men turned out for the most part have not proved efficient teachers.

Here, perhaps, we may say something in regard to the students sent for study to the United States and Europe. Realizing that it would be many years before the government could establish efficient higher education in the empire, the movement to select young men who have completed their elementary education in China, and to send them abroad for advanced study, has been encouraged. At first these young men were sent from each province at the expense of the provincial authorities. When the American Government decided to remit a portion of the Boxer indemnity, it was decided by the central government of China to employ the money, saved to her as the result of this act of generosity, in sending students to study in the United States. It was arranged that for five years one hundred young men should be sent annually, and after that fifty each year. A competitive examination was held in Peking for securing the best candidates. Three batches have already been sent, but, strange to say, the government thus far has never been able to secure the full quota. Last year a new method was adopted. This was the founding of a special school near the summer palace outside of Peking (the Ching Hua Hsioh-tang). A large number of American teachers was secured and a course of study was drawn up to prepare young men to pass the American college entrance examinations. The school has only been open for a short time, and thus it is too early to pass judgment upon it. It is hoped it will produce better results than the former method of selecting students from all schools throughout the empire by competitive examination.

The present status of the new system of education in China may be learned from the statistical reports submitted to the throne by the ministry of education, one in 1908, and the other at the end of 1910.

A comparison of these reports is interesting. In 1908 the number of students in provincial schools was 1,013,571, and at the

end of last year 1,284,965. Thus there was an increase of 274,518. This included 3,951 more students in special studies, 4,923 additional students in industrial studies, and 265,644 more in ordinary studies. Students in training schools for teachers (normal schools) were 3,394 less in number.

The number of students in Peking showed an increase of about twenty-five per cent, the figures being 15,774 and 11,417, respectively. There was a considerable increase in the number of schools. In the provinces there are now 42,444 as compared with 35,597, and in Peking 252 as compared with 206. It also appears that when the first report was presented the number of government schools, those supported by officials, exceeded those supported by public contributors and private individuals, and that when the second report was sent in the public and private schools were more numerous than the government schools.

On the whole these reports are encouraging, but at the same time they show that China has only begun to grapple with the problem. In Japan, with a population roughly estimated at sixty millions, we find that about six million young people of school age are under instruction. If the same proportion, that is, about one-tenth of the population, was provided with education in China, it would mean that forty million young people must be afforded school facilities. Thus far not as many as two million are to be found in the new schools and colleges.

We have already spoken of the grades of schools. We will now give a brief outline of the course of study in each grade.

I. Kindergarten

The aim of these schools is "to gather the children from three to seven years of age during certain hours of the day, to separate them from the dangers of the street, and to give them primary ideas of morality. These schools are free, and are to be established near orphanages and the homes of virtuous widows."

II. The First Grade Elementary School

The teaching includes morals, the study of the canonical books, the Chinese language, arithmetic, history, geography, physical sciences, and gymnastics. Children of seven years of age may enter

these schools. The course is five years and there are thirteen hours class work per week.

III. The High Grade Elementary School

The subjects taught are the same as those in the first grade elementary school, with the addition of drawing. The study of foreign languages is forbidden except in schools situated in cities open to foreign trade. The course is four years and there are thirty-six hours class work per week.

IV. Middle School

The instruction in these schools corresponds to what is called "Secondaire Moderne" in France, and the High School in the United States. The subjects studied are twelve in number, namely, morals, Chinese canonical books, foreign languages (Japanese or English compulsory, French, German or Russian optional), history, geography, mathematics, natural history, physics, chemistry, political economy, government, drawing and gymnastics. The singing of patriotic songs is to be taught both in the middle and the elementary schools. The course is five years, with thirty-six hours class work per week. Pupils who have obtained the diploma in the high grade elementary schools or who have passed an equivalent examination are admitted into the middle schools.

V. High School

The aim of the high schools is to prepare students to enter the university. There are three divisions corresponding to the three groups of faculties in the university. The students in the first section will be prepared for the faculties of classics, law, arts and commerce; in the second for the faculties of science, civil engineering and agronomy; and in the third for the faculty of medicine. All the scholars will study ethics, law, Chinese literature, foreign languages, and gymnastics. In addition to these, the students in the first section will study history, geography, elocution, law and political economy; the students of the second section, mathematics, physics, chemistry, geology, mineralogy and drawing; and those of the third section, latin, mathematics, physics, chemistry, zoology and botany. The foreign languages to be studied in the first and second

sections are English, and French or German, and in the third section, German, and French or English. The course is three years, with six hours work in the classroom each day (thirty-six hours per week). Students who have obtained the diploma of the middle school or who have passed an equivalent examination are admitted into the high schools.

VI. The University

The university is still in an embryonic condition, due to the lack of both students and professors. Eight faculties are to be established:

1. The faculty of Classics, comprising ten courses, among which are: (a) The Book of Changes, (b) The Book of Annals, (c) The Book of Poetry, (d) Spring and Autumn Annals, (e) Rites, (f) Confucian Analects, and the Books of Mencius, with commentaries, (g) Philosophy.

2. The faculty of Jurisprudence, with two courses: (a) Administration, (b) Legislation.

3. The faculty of Arts, comprising nine courses: (a) History of China, (b) Universal history, (c) General geography, (d) Geography of China, (e) Geography of England, (f) Geography of France, (g) Geography of Germany, (h) Geography of Russia, (i) Geography of Japan.

4. The faculty of Medicine, comprising two courses: (a) Medicine, (b) Pharmacy.

5. The faculty of Science, comprising six courses: (a) Mathematics, (b) Astronomy, (c) Physics, (d) Chemistry, (e) Natural history, (f) Geology.

6. The faculty of Agronomy, comprising four courses: (a) Agriculture, (b) Chemistry relating to agriculture, (c) Forestry, (d) Veterinary science.

7. The faculty of Engineering, comprising six courses: (a) Civil engineering, (b) Mechanical engineering, (c) Electrical engineering, (d) Architecture, (e) Industrial chemistry, (f) Mining engineering.

8. The faculty of Commerce, comprising three courses: (a) Banking and insurance, (b) Commerce and transportation, (c) Customs.

The course of study in the university is for three years except

in medicine and law, in which it is four years. The students have from two to four hours class work per day.

Students who have secured diplomas in high schools may enter the university. The situation of the university is at Peking. If a province wishes to open a university, it may do so, provided it can establish at least three faculties.

Students who graduate from the university with high standing are allowed to do further post-graduate work for five years. Means will be provided to permit of their traveling abroad for purposes of study. Each year they must render a report of their work.

There are two grades of normal schools, the lower and the higher.

I. The Lower Normal School

The object is to train teachers for the first grade and high grade elementary schools. The subjects to be studied are morals, study and explanation of law, Chinese language, pedagogy, geography, history, mathematics, natural history, physics and chemistry, calligraphy, drawing and gymnastics. The course covers five years, each having forty-five weeks with thirty-six hours class work per week. Students who wish to enter these schools must have completed the high grade elementary school. According to local circumstances, one or more of the following subjects may be added: foreign languages, agriculture, commerce, manual training.

II. Higher Normal Schools

The object is to train teachers for the schools of higher grade. The course is three years, with thirty-six hours class work per week. The subjects in the first year are the same for all students, but in the last two years the students are divided into four courses: (a) languages, (b) history and geography, (c) mathematics, physics and chemistry, (d) natural history.

Nothing has been said thus far about girls' schools. According to the decree which appeared in April, 1907, elementary schools of the first grade and high grade were to be established for girls, but no provision has yet been made for higher education. There are also normal schools for girls to train teachers for the girls' elementary schools. The studies in the girls' schools are the same as those in the boys', with the addition of fine art and needle work, housekeeping, sewing and music.

As has been described, according to the old system of education degrees were conferred on the successful candidates at the civil service examinations. They are now given to students completing in a satisfactory manner the courses in the new schools. Graduates of the high grade elementary schools may receive the title of "Siu-tsai" (B.A.), those of the middle schools the title of "Kun-sang" (presentable bachelors), those of the high schools Chū-jên" (M.A.), and those of the university "Chin-shih" (Ph.D.).

Students who have studied in the United States or in Europe, after completing their courses abroad, upon their return to China may attend a special examination in Peking held in the autumn of each year. Upon the result of these examinations they are given Chinese degrees equivalent to those obtained in foreign countries and are made either Chū-jên (M.A.) or Chin-shih (Ph.D.). Thus they put themselves in line with the Chinese educational system, and become eligible for employment in government service.

A word may be said as to the employment of foreign teachers in Chinese schools. When the system was first inaugurated it was necessary to secure good foreign instructors, especially for the middle and high schools. During recent years the number of those employed has diminished, although at no time has it been very large. The attempt was made for a while to replace American and English by Japanese teachers on the ground of economy, but it has not proved very successful.

Rules have been drawn up by the board of education in regard to the employment of foreign instructors, and it is strictly stated that they are not allowed to interfere in school matters outside their own classrooms, and are not permitted to proselytize in regard to religion.

It has often happened that men who have come out from their own countries to accept positions in Chinese schools find on their arrival that they cannot secure students competent to study higher branches, and consequently they have been obliged to spend most of their time in imparting elementary instruction.

As the educational system develops foreign specialists will be needed in greater numbers, for it must be some time before China can provide the teachers needed for university and high school work.

Thus we have given an outline of China's method in revising her educational system. Much might be said in way of criticism.

Notwithstanding the present inefficiency of the system, we must still wonder at so much being accomplished in so short a space of time, and must sympathize with the Chinese in the innumerable difficulties which they have to surmount. The financial burden of the new system has been very great and has retarded progress.

Perhaps the least pleasing feature has been the unruliness of the student class. The new ideas of liberty and equality have turned the heads of the young men and they have often proved an intractable body to manage. Many a school with bright prospects has been wrecked by rebellion against the authorities on the part of the students. Those placed in charge of the schools of higher grade have, for the most part, been officials with absolutely no experience in educational matters, and naturally they have not commanded the respect of the student body.

As time goes on such matters will be rectified, and we may confidently expect that an efficient educational machine will be constructed in China similar to that already existing in Japan.

Such a revolution as this implies must produce results so far-reaching that it is impossible to make an accurate forecast. When enlightening education pervades China, it will produce effects which even the more sanguine can hardly imagine. The next ten or twenty years will prove the value of the new education in China.³

³ Since this article was written, a report has been received of the Imperial Educational Conference, held at Peking during the past summer. Among the important subjects discussed were the following: (1) The Extension of Primary Education; (2) The Adoption of Compulsory Education for Children from Six to Fourteen Years of Age; (3) Military Training in Public Schools; (4) The Discontinuance of the Study of the Canonical Books in the Primary School; (5) The Discontinuance of Granting Degrees to Graduates from the Schools of Lower Grades. The decisions arrived at are to be submitted to the National Assembly (Tzecheng Guan) at its next session. The holding of such a conference is an evidence of the deep interest felt throughout the Empire in the subject of educational reform.

EXTRATERRITORIALITY IN CHINA

BY F. E. HINCKLEY,

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By largely similar treaties with eighteen of the powers, China has granted full exemption from her territorial jurisdiction in favor of the nationals of these powers residing or traveling in China, and over the property of these nationals, real and personal, situate in China. These eighteen, in order of the dates of their first treaties, are: Russia, by a treaty of 1689 for the Mongolian border; the United States by the first of the modern and distinctly extraterritorial treaties—a treaty negotiated by Caleb Cushing, afterwards United States Attorney-General, whose draft was so excellent as to have been generally followed as a model in the negotiations of the treaties of other powers with China; then Great Britain, France, Norway and Sweden (now as two powers with one treaty), Germany, Portugal, Denmark, Holland, Spain, Belgium, Italy, Austria-Hungary, Japan, Peru, Mexico, and Brazil. These are practically all of the powers that have treaties of any nature with China. Even if there were commercial treaties with other countries containing most-favored-nation clauses, such clauses would probably not extend the extraterritorial exemption; yet it has occurred that when powers without extraterritorial treaties have permitted exercise by a friendly power of jurisdiction over their nationals, for instance, jurisdiction over Greeks by consuls of France, China has acquiesced, and it has also occurred that in isolated cases a non-treaty consul, like the consul of Cuba, has adjudicated over his nationals in China without effectual protest by the Chinese government; but such friendly and non-treaty jurisdiction is a negligible minimum. The substantial fact is that China has continuously maintained her jurisdiction sovereignty excepting as specifically abrogated by treaty.

The counterpart of this treaty exemption from Chinese jurisdiction is the agreement to extend the respective national jurisdictions into China. The rule of the treaties is that a defendant is sued in the court of his own nationality, and by mutuality of practice this rule is extended in favor of a plaintiff of whatever foreign

nationality he may be. The jurisdiction is mostly exercised by consuls at the various ports. Some of the powers have but one or two consuls for all China. Few of the consuls are men of any training or experience in the law. In some cases a consul may be assisted by one or more assessors, and, with them, the consul judges both of law and fact. Most of the foreign jurisdictions are but meagerly developed. The larger powers, however, have special legislation as to their courts in China. Great Britain and the United States have each established higher and general courts independent of their consular systems, respectively known as H. B. M. Supreme Court for China and the United States Court for China. These two higher courts exercise their jurisdiction mostly at Shanghai, where court business readily concentrates. They hold sessions in other consular cities in China when the public interest requires. They exercise general appellate and certain supervisory powers. They and the systems of courts of which they are the head are the highest and most extensive development of extraterritorial courts in the world. The United States Court is analagous to a federal circuit court, though with wider jurisdiction inclusive of the jurisdiction of a higher state court, and the British Supreme Court has the jurisdiction of a high court of justice in England.

Another form of court has been evolved by time and necessity but without close adherence to the treaties. This is the so-called mixed court. It is a court existing in each of the consular cities. It is for the trial of Chinese defendants. A Chinese magistrate presides over it and with him sits a foreign assessor, regularly of the nationality of the plaintiff. The consul himself may be the assessor, but in the main cities a vice-consular officer, ordinarily a Chinese linguist, is assessor. At Hankow the Chinese magistrate goes from one consulate to another to hold trials on regular days. The practice varies in different cities. At Shanghai the mixed courts are extensive establishments, with three or four Chinese magistrates, the criminal cases being heard almost entirely in the presence of British, American, German and French assessors, the French having a separate court. It is also distinctive of Shanghai that the assessors there, while having, as in other cities, strictly but a right to be present and to object in cases involving their own nationals as plaintiffs, in effect direct what the judgment in every criminal case shall be and have assumed an almost

equally preponderating authority in civil cases that involve their respective nationals as plaintiffs. The premise is taken that criminal jurisdiction exercised in or respecting the international foreign settlement at Shanghai involves such foreign interests, whoever the complainant may be, that a foreign assessor representing those interests has an implied right to appear and to direct the judgment. There is practical advantage in this system, however far it departs from the letter of the treaties. The mixed court at Shanghai is but a very low court in the jurisdiction systems of all the powers that have to do with it, yet it is the busiest of all the courts at Shanghai and it adjudicates actions involving very large values and most important personal interests.

The consular courts also are far from having reached a development adequate to present conditions. They mostly rest upon treaties made soon after the British war of 1842, and renewed with little change soon after the British and French war of 1858. In those years the foreign inhabitants of China were men in charge of large business concerns and missionaries and the immediate dependents of both, and all foreigners were located in or near to the principal ports; but in 1911 there are in China all classes of Western society, and foreigners resident in China number many thousands. There are also many tourists. No restriction on immigration excepting that of health inspection exists. The most cosmopolitan aggregations and combinations populate the ports and penetrate to remote places. The foreign population of China exclusive of the Japanese and Russians in Manchuria, must be well above 30,000. These are mostly merchants and missionaries. There are few men of the professions and of course few or none of the large classes of industrial and agricultural populations familiar at home. Adventurers and vagrants, gamblers and prostitutes infest the ports, affirming or disclaiming their nationality according to the lenience or severity of their national authorities. Foreign missionary societies enjoy a treaty privilege of acquiring land for mission purposes both in the consular cities and in the interior. Foreign merchants have extended their trade into the most distant regions. The last twenty years have seen an increase at high ratio of all sorts of contractual relations between foreigners and Chinese. Partnerships and companies, numerous and varied in nature, having a foreign name and protection but involving

Chinese members and not infrequently being controlled by Chinese, have come into being without adequate executive and jurisdictional regulation. In fact the requisites of the extraterritorial communities in China have come far to exceed the legislative provisions made for them. The British interests in China are probably more adequately provided for than any other.

British legislation has been founded upon the Foreign Jurisdiction Acts, the latest of which is the Act of 1890. This Act is very brief, general and fundamental. On it are based the Orders in Council amplifying and perfecting the system. Orders in Council have been frequent and they seem to be readily obtained. Besides, there is the often and very timely exercised authority of the British Minister at Peking to make regulations of the nature of substantive law and having the force of law until and as modified by the higher legislative authority. By this power of the Minister local and temporary conditions usually of emergency nature are regulated. But the control of the jurisdictional system, that is of court procedure and, as shown mainly in the well and lengthily developed Rules of Court, of the operation of the courts generally, rests primarily with the Judge of the British Supreme Court for China. This court was organized in 1867. Unfortunately there is no collected series of its reports, and reference must be had to the reports published from 1867 to date in the official organ, the *North China Herald*. The long and eminent standing of the British Court and its wisely directed and wide-reaching activities have well and effectually protected, regulated and promoted British interests in China.

The British Crown Colony of Hongkong, situate at the commercial portal of South China and having, with other branches of government, a Supreme Court, has adjudicated many of the most important cases arising out of extraterritorial relations with the Chinese and has also largely enhanced British prestige. This court has of late years a collected series of reports. British companies in China are regulated by Hongkong Ordinances. This arrangement may in time be modified to meet difficulties due to the fact that business at Shanghai has now become proportionately greater, and authority may be given to register and regulate companies through British officials at Shanghai; but the facility and security of registration and regulation through British colonial offices at Hongkong in the last half century has brought under the British

flag vast foreign business in China, especially German, American and Chinese.

The German government has now under consideration the establishing of a higher and general court for all Germans in China. It is also considering a modification of companies' statutes so as to favor the association or incorporation of companies in China under German law with registration in Kiaochau, the German leased area in North China.

The United States government has no specific legislation as to companies in China. The usual way of organizing American firms has been to register the articles of association at one of the consulates or to incorporate under the Hongkong Ordinances. In a few cases there have been incorporations under home jurisdictions as of Arizona or Delaware or the District of Columbia, and this is easily done under some jurisdictions. The degree of liability of such corporations in China is not clear. There is some doubt whether the incorporation statutes of the home jurisdictions were intended for or can be held to have force with regard to business firms conducting their business entirely outside of the continental territory of the United States. What is the status of home corporations doing business under American jurisdiction in China has not been determined. With a number of such corporations doing large business, this backward condition of the law, though strange, is an evidence of their good management and fair dealing. It is a tribute also to American diplomatic and consular officials who have conducted negotiations with the Chinese government and its officials affecting these companies. On the other hand, the ease with which unscrupulous persons have at times and in certain consular districts formed themselves into companies largely with Chinese capital under an American name and American consular recognition has not been creditable and has been a detriment to legitimate business.

The repression of crime in so large and so fluctuating a foreign population as now exists along the China coast is one of the chief reasons for maintaining the extraterritorial jurisdictions at a high degree of efficiency. Vagrancy is more difficult to deal with in a land where few Europeans do manual labor and where honesty and respectability are presumed to belong to foreigners generally. Yet the almost daily convictions, at Shanghai for instance, of low-class petty offenders have at last necessitated the stone-pile and

the work-house. In most of the consular courts in Shanghai the only penalties for vagrancy have been fairly comfortable imprisonment and further charity. Deportation is expensive and impracticable except as to the more serious offenders. In other grades of society there is now and then a criminal offender whose offense is not easily prosecuted because of the extraordinary local difficulties of securing convicting evidence. The consuls and other court officials are relatively few, and measures of detection and proof of crime feasible in home jurisdictions entirely fail in China where the jurisdictions are so many and so complex. Of crimes of violence by foreigners of the degree of murder, burglary, robbery, arson and rape there are very few. Commercial wrongs, such as embezzlement and obtaining goods on false pretenses are not infrequent, and at times there is forgery. Gambling at roulette for foreign patronage and at a Chinese game called pai-chu for Chinese patronage has been opened whenever the vigilance of the authorities has relaxed or whenever with the connivance of unscrupulous persons, even of officials and lawyers, a ruse or tangle of jurisdiction or evidence could be devised. Prostitution among foreign men and women has given the China coast an evil reputation, but there has been rigorous dealing with this vice at Manila and in American jurisdiction in China. At Shanghai liquors are sold in bawdy-houses without municipal licenses and the income from this sale is said to be the principal income of these places. The compulsory registration of prostitutes in the consulates of their nationalities would, by definitely fixing jurisdiction over them, aid at least in placing responsibility for their indecencies.

For the apprehension and custody of criminal offenders there are attached to the consulates of the leading powers in the principal cities officers in most cases known as marshals, and at Shanghai there are prisons and prison-keepers. British long term prisoners go to Hongkong; those of other nationalities are usually sent home. The principal foreign municipalities have police or constables; the police in the International Settlement at Shanghai have on their rolls about 250 foreigners, almost all British, 500 Sikhs and 1,200 Chinese. The foreign army, marine and navy contingents on service in China or Chinese waters may be called upon for assistance when necessary. The Chinese have authority under the treaties and customs to arrest, except in foreign settlements, a foreign crim-

inal offender and bring him to the nearest consulate of the offender's nationality. Thus an American charged with homicide was brought, in 1908, by the Chinese from the borders of Thibet to Chungking in central China, 600 miles, and thence, with the witnesses, to trial in Shanghai, 1,200 miles. He was acquitted on a finding of accidental homicide, but had he been convicted to serve imprisonment for more than a year, he would, in usual course, have been sent thousands of miles farther to a federal prison in the United States.

Extradition of fugitive offenders to and from China is not provided for by treaty. China is the greatest and most accessible area in the world not yet protected against the coming and going of criminals. A criminal slips aboard a steamer at Shanghai and is off to Japan or Hongkong leaving the prosecuting officers to contrive means not provided for in the law to bring the fugitive to justice. A British offender in China can be returned from any British jurisdiction because extradition acts are extended to British jurisdiction in China. But it has been ruled that the British and American extradition acts do not reciprocally extend to their extraterritorial jurisdictions—a ruling which on the principles of law involved appears rather too narrow. It is a surprising and embarrassing fact that an American offender cannot be extradited to or from the United States from or to China, though United States jurisdiction is as absolute over him in one place as the other. Legislation, which could be in a simple form, is requisite; the United States extraterritorial jurisdiction in China should, for the purposes of its administration solely, be designated as a jurisdiction of the same standing as federal jurisdiction in one of the territories of the United States, and the extradition statutes should be extended to this China extraterritorial jurisdiction just as they were to the Philippine Islands.

Legislation is also needed for better establishing the jurisdiction and supervising the administration of estates of American decedents in China. The number of estates, their value, the complexity of the jurisdiction, the want of the assistance of American lawyers except at Shanghai and Tientsin, and the undeveloped probate procedure have made this feature of the jurisdiction the most constant business before the American courts in China and have put upon executive officials of the courts an extraordinary respon-

sibility. All estates of a value above \$500.00 are, by judicial interpretation of a statute, required to be formally administered under decrees and orders of the United States Court for China. Such estates are reported from the consulates and the initial procedure for bringing them into the court is usually taken by the clerk of the higher court acting on instructions from the judge. Many of these estates are not much in excess of \$500.00 and such are likely to be the estates of missionaries residing in out-ports or in the interior whose families and beneficiaries prefer as simple and inexpensive an administration as can be had. For this class of estates the gratuitous assistance of the clerk of court is well deserved and much appreciated, and it has the advantage of facilitating and of tending to standardize the procedure. Such assistance consuls had previously given under their general instructions and by customs special to this jurisdiction. This feature of the duties of the clerk of the higher court could very well be formally recognized by making him a registrar of probate with statutory functions including some of the functions of a public administrator. The larger estates have been administered without difficulty through the exceptional care to each step of the procedure which has been given by the judge of the higher court. This has enabled him as the judge of a court established only in 1906 to familiarize himself with every feature and problem relating to the administration of American estates in China; but it is a burden which, with the increase of his duties in connection with the other features of the jurisdiction, and with the development of probate procedure will distribute itself, as it does in home jurisdictions, amongst the lawyers engaged by executors and administrators especially now that there are a number of well established American lawyers in Shanghai and other ports.

The entire probate jurisdiction, however smoothly it has thus far operated, needs to be better established by statutory enactment. There never has been a specific grant of the jurisdiction to the American Courts in China. The consular courts had for many years customarily exercised probate jurisdiction. The United States Court for China has supervisory powers over consuls in their executive duties with respect to estates of Americans in China. The first judge of the court, Judge Lebbeus R. Wilfley, decided that in granting common law jurisdiction to the courts in China, Congress had granted such probate jurisdiction as the common law courts of England had reserved to themselves, notwith-

standing that when the colonies became independent of the mother country, probate jurisdiction was being exercised principally by the ecclesiastical courts and notwithstanding that in the colonies, as later in the states, probate jurisdiction was exercised only upon specific statutory grant. This decision, and any other decision regarding the probate jurisdiction of our courts in China, has not been reviewed by an appellate court in the United States. Legislation is nevertheless apparently necessary.

In another decision Judge Wilfley established that there had been no grant of jurisdiction of matrimonial causes. The distinction lay in the fact that the ecclesiastical courts of England in the time of our colonial dependence had exercised this jurisdiction exclusively. In the United States jurisdiction of matrimony rests absolutely on statute. Consequently divorce cannot be had in American jurisdiction in China. As a matter of public policy, and considering that courts of other foreign jurisdictions in China, either have only a limited jurisdiction of matrimonial causes and practically never exercise the jurisdiction, it is unquestionably better that no American court in China should have more than such a limited jurisdiction. The American consular courts, however, had, prior to the creation of the higher court that took over the main jurisdiction, granted absolute divorces. On the other hand the lack of some such jurisdiction has proved a severe hardship in several instances of non-support of a wife and of desertion. What power, if any, the courts would exercise as courts of equity for relief in such cases has not been tried.

Other leading decisions by Judge Wilfley were as follows: Domicil is acquired in extraterritorial jurisdiction in China on principles analogous to acquisition of domicil in a jurisdiction at home. The term "common law" in the statutes establishing extraterritorial courts in China is interpreted to mean those principles of the common law of England and the statutes passed in aid thereof, including the law administered in the equity, admiralty and ecclesiastical tribunals, which were adapted to the situation and circumstances of the American colonies at the date of the transfer of sovereignty, as modified, applied and developed generally by the decisions of the state courts and by the decisions of the United States Courts and incorporated generally into the constitutions and statutes of the states. The United States Court for China, though analogous in some respects to a federal court, has no jurisdiction

under the federal bankruptcy act, the enforcement of that act having been restricted to certain federal courts.

A bankruptcy case involving large amounts and in which the principal creditors were a German bank and a Chinese bank, one having actual possession and the other claiming constructive possession of assets, was adjudicated by Judge Rufus H. Thayer, who succeeded Judge Wilfley late in 1908. Judge Thayer exercised jurisdiction on the basis of common law insolvency, but, under the circumstances, and after consent of the creditors, the insolvent having left the jurisdiction, he adjudicated the case in much the same way as an arbitrator might do in an effort to effect substantial justice among the parties.

Judge Thayer's decisions have been numerous and important. It is difficult briefly to state how much they have defined and improved the jurisdiction. In a homicide case in which a Chinese official had a treaty right to be present and to question witnesses, the policy and procedure under a somewhat difficult treaty provision were so controlled as to form an excellent precedent comporting with the high authority of the court and declared by the superior Chinese authorities to be eminently satisfactory to them as a fulfilment of the treaty. In the estate of a decedent who had held real property in trust for a Chinese, Judge Thayer held that a question of title was not to be determined in the court having jurisdiction of the estate, but in the court of the Chinese who had granted the trust. The law governing a contract when not stipulated by the parties he has held to be the law of the nationality of the party sued. Jurisdiction of real property in China in whatever foreign consulate it is recorded follows the jurisdiction of the person who holds the fee simple or similar title. The nature and requisites of appeals from consular courts have been ruled upon. Jurisdiction has been taken of three civil cases against consuls concerning performance of official duties. A consular court marshal and a legation stenographer have been tried for embezzlements. The court has, on the principles involved, ruled adversely to a claim of foreign nationality set up as a bar to a criminal action. It has upheld the local regulation of the nature of a statute of limitations in a criminal case in place of the federal statute. It has found void a local regulation of the Minister as to vagrancy, and in its stead has followed and differentiated the decision of the Court of Appeals as to the effect had in China by federal legisla-

tion for the North American territories and the District of Columbia.

Appeals lie from the consular courts to the United States Court for China and from the latter to the United States Circuit Court of Appeals at San Francisco and thence to the United States Supreme Court. Appeals from the United States Court for China have been few, especially since the court has become well established. The main appellate decisions have been as to right to bail, as to what constitutes assault with a deadly weapon, as to procedure of writ of error, and, what appears most important of all, as to the significance of the term "laws of the United States" to be administered in the courts of the United States in China. In the latter decision—*Biddle v. United States*—on the error assigned that obtaining money on false pretenses was not a crime under common law or under the laws of the United States available in China, the Court held that laws enacted for jurisdictions where the United States exercised exclusive jurisdiction, as in the territory of Alaska or the District of Columbia, or the military and naval reservations in the states, were laws of the United States available for the definition of the offense of obtaining money on false pretenses in China. This decision was most far reaching and its full effect has been difficult to comprehend. The resulting conflict of definitions of statutory offenses remains for further determination.

A most important *habeas corpus* case, that entitled *In re Ross*, was decided by the United States Supreme Court in 1890. It arose on a claim of right of jury trial for the defendant on a charge of homicide. The opinion of the court, prepared by Justice Stephen J. Field, who had had earlier study of extraterritoriality as Circuit Court Justice in California through his decision of a case on appeal from the Consular Court at Canton, examined into the fundamentals of the jurisdiction and disclosed the nature of the consular courts as courts intended to aid in fulfilling our national treaty obligations and as such having a special and limited jurisdiction, favorable to a defendant as being exercised on principles similar to those of his home jurisdiction even though unfavorable to him as not having certain home privileges, such as trial by jury, vouchsafed to him. No court opinion is more enlightening as to fundamental principles of extraterritoriality than Justice Field's opinion *In re Ross*.

The extraterritorial courts of the several powers in China are

closely related to their consular systems and are under the foreign affairs departments of the respective governments, yet in the exercise of their purely judicial functions the judges and the consuls constitute independent courts with their decisions not reviewable except by the higher courts. The incumbents of the principal offices in the courts should be and generally are men not only thoroughly trained and of experience in the law, but also men of large acquaintance with conditions in China and of special aptitude for maintaining relations with Chinese and other foreign officials. The rapid development of foreign interests in China and of Chinese relations with foreigners incessantly raises novel and complex problems. To maintain justice, secure protection and promote friendly relations is the object of the treaty extraterritorial courts; it is an object of the first importance, and under the conditions in China it requires for its attainment a high grade of court personnel and a highly developed system of courts and of statutes and decisions defining the law.

China is developing her own system of law and of courts on European models. This development has been slow and irregular. Yet it may, under the present changes of government, come rapidly and permanently. In their commercial treaties of 1902 and 1903 Great Britain and the United States agreed to give every assistance to the reform of the judicial system of China and to be prepared to relinquish extraterritorial rights when satisfied that the state of the Chinese laws, the arrangements for their administration and other considerations warranted so doing. To foreign residents in China the time when relinquishment of jurisdiction will prove feasible seems far distant. The extraterritorial system has advantages, but in modern conditions it is at best anomalous and unsatisfactory as a means of doing justice and it tends to fall of its own complexity and weight. Only the larger powers can afford to maintain it and only they appear able readily to adapt their systems of laws and courts to the rapidly changing conditions. All relations with China and with the Chinese will be better when China shall have resumed her full territorial sovereignty and risen to the place of international power which her vast territory and resources, and her great people and newly progressing government shall justify and command.

THE CHINESE YOUNG MEN'S CHRISTIAN ASSOCIATION

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For the milleniums of history, Old Age has reigned in Asia. A well known Oriental has said: "The East has never had a young man." The young man of China was born with the travail of the Boxer uprising. From that time the Celestial empire ceased to remember that "The past excels the present," and set itself in earnest to attain its true golden age. "The Renaissance, Reformation and Revolution at one time and in one country," is a most fitting description of present conditions. These changes have produced the young man. Schools were to be established, railroads constructed, army and navy reorganized, law codes revised, telegraph and telephone installed, new industries fostered, form of government changed, moral evils righted, sanitation introduced, western institutions investigated, vast resources developed, intricate political situations met. These all called for the young man with his training in the new education. He was the one fitted for the task and was put in important posts in every department of government in the new China. To help this young man in his new and old physical, social, intellectual, moral and religious needs is the duty, opportunity and purpose of the Young Men's Christian Association in China. This is its task and reason for its establishment.

That there are needs which such work is suited to meet is shown by its rapid growth and firm hold on the communities where it has been carried on for a number of years. Although a few Student Associations had been established for some time previous, yet it was not until 1895 that Mr. D. W. Lyon, the first foreign secretary went to China. He was soon followed by Mr. F. S. Brockman, Mr. R. E. Lewis and Mr. R. R. Gailey and work began in Shanghai and Tientsin. The above changes created opportunity, and growth thereafter was rapid. The foreign staff has increased from the above four to forty-six, and still more important is the

equal number of Chinese secretaries. There are fourteen fully organized general associations with a membership of 4,631 and work is being carried on in initial stages in seven more places. The call for further expansion is beyond the possibility to meet, in fact, it would be easy to name ten more cities, important student and commercial centers, where work should be started at once, and where delay means loss. It has always been the policy for the beginning years to establish well organized, well manned, efficient Young Men's Christian Associations in important centers as models for future expansion, and organization in smaller cities where proper secretarial help and supervision are impossible has been discouraged. Were it not for this, a mushroom growth of a large number of inefficient Associations would quickly follow, a thing to be avoided and only mentioned here as an indication of the spread and approval of the idea of all around work for young men. In fact, such is the call for this form of work that one of the secretaries has described the task of the foreign secretary as "Sitting as far out on the lever of the safety valve as possible that the pressure of work and opportunity might not become too great to be controlled."

The most fully developed individual association is at Shanghai. Here the conditions are most suited for the work. It is a large commercial center with many thousands of young men away from home and it is wholly under foreign control, minimizing Chinese prejudice against the new and western. These two things were favorable to growth. In 1905, it was felt that it was time to leave rented quarters and have a permanent equipment. A sum of \$100,000 was subscribed, half in China, and half abroad, for a new building. This was finished in the spring of 1907, giving a large well equipped plant. Yet within three years, the work had outgrown these quarters. The membership increased from 350 to 1,600, the employed force from 17 to 52, educational enrolment numbered 600, and there was need of room for a boys' department. So in 1910, \$46,000 was raised, entirely in Shanghai, for a large addition to the present building. A significant thing about all this is, that though foreigners have helped it has been essentially under Chinese control. The board of directors is composed entirely of Chinese and has numbered many who occupy prominent positions in government, education and industry. Of the fifty-two employed

as secretaries and teachers, only four are foreigners. Other salient features of this work will be brought out later in the paper, the above will suffice to show a rapid expansion and a deep hold on the community life attained through Chinese approval, effort, and support.

Not service by foreigners to Chinese, but by Chinese for Chinese is the heart of the policy of the movement. The greatest good that can be done a community is to get the best of its members working with tested methods for the rest. To establish a self-supporting, self-governing and self-perpetuating Chinese Young Men's Christian Association is the purpose of the foreign secretary. To this end, the boards of directors of all the fully organized associations are composed entirely of Chinese. They assume complete control of the work, the foreign secretary being under the Chinese board of directors just as the secretary in this country is under his board of directors. They assume financial responsibility for the current expenses, in some cases amounting to \$20,000, and raise it locally. Only the personal budget of the foreign secretary and some permanent equipment are provided from America.

This appeal to the spirit of service, ability to carry through large undertakings, independence, self-respect and national pride of the Chinese has produced its fruit in the procuring of strong men to give their time as secretaries, committee men, and directors. Mention should be made of Mr. S. K. Tsao, who for years has been the mainstay of the Shanghai association, refusing salary twice as large in government service in doing so; Mr. C. T. Wang, a graduate of Michigan and Yale universities, for a time president of the Chinese Christian Student Federation of America, who is giving his fine qualities of leadership as a national secretary; Mr. H. L. Zia and Mr. P. S. Yie, who have put the literary work of the association on a very high basis; Mr. C. H. Fei, who comes to the Peking Association, a M.A. of Yale, and for three years principal of the Paotingfu Provincial College, and a number of others. Prominent as directors have been Mr. K. S. Wang, superintendent of the Han-Yang Iron Works; Mr. P. L. Chang, a prominent educator of North China; H. E. K. S. Tang, twice representative of the Chinese government at Opium Conferences, and a director of the Indemnity Scholarship Bureau; Mr. T. T. Wang, now superintendent of Chinese students sent by the govern-

ment to America, and Rev. C. Y. Cheng, representative for China on the continuation committee of the Edinburgh Conference. Men, men with high abilities, dominated by a spirit of service and trained in efficient methods are the strength of a nation, the hope of a people. Perhaps the greatest service the association can render, then, is its Diogenian search for men who will give their talents for the service of their fellow countrymen.

A Christian institution, getting its financial support almost entirely from non-Christian sources, is the strange fact about the Young Men's Christian Association in China, a marked testimonial of the value of its broad work and the equally broad mind of the Chinese. At Shanghai during the last decade, more than \$100,000 has been contributed to the association; this last summer at Foochow, \$20,000 was raised for two building sites; and previously \$27,000 at Canton and \$22,000 at Tientsin were procured for the same purpose. Far the greater part of all the above came from non-Christian Chinese sources. This is largely explained, apart from the generosity of the Chinese people, by the policy of having a Chinese institution without the taint of foreign control, the making of no distinction of religion as far as privileges of membership are concerned, and appreciation of the educational, physical and moral value of the work. This Chinese financial support has not only the mercenary value of dollars and cents, but it has done much to arouse the spirit of service among the contributors. We know of at least one instance where a large gift to the association started a wealthy man on a career of philanthropic service. Often the giver is the most blessed.

With this summary of the purpose, policy, extent and deep root of the Young Men's Christian Association in China, let us now proceed to some of the needs which it is trying to meet.

"The Hope of China," is a book inspired by the late famous Confucian statesman, Chang Chih Tung, setting forth the need of education. This title epitomizes the faith of most Chinese to-day. One cannot describe the hue and cry for knowledge during these years—knowledge of government, science, economics, sociology, western institutions, anything which will shed light at this time of a nation's changing. In 1902, modern schools were established and grew in enrolment to 1,300,000 in six years. Students in great masses have gone abroad over the whole world. It is not strange,

therefore, that the Young Men's Christian Association has found a great opportunity in education. So great, in fact, has been the demand that against all association precedents, day schools have been started in some places. In Tientsin the Putung school, established by the Young Men's Christian Association was the first high school in the north and is commonly known as "The Parent High School of Chihli Province." It is one of the few schools under Christian management that has official recognition of the Chinese Board of Education. Founded at the time when schools were springing up everywhere and in touch with prominent local educators, this school has taken the lead in the athletic and extra-curriculum student life of the city, and through secretary and teacher has been of real assistance in advice, example and even active teaching to a number of government schools. In Shanghai, also, a very successful high school of 250 pupils, sons of prominent men of the city, has been carried on for years. It prepares students for a large college of the region and the sustained attendance and satisfaction given are sufficient justification for its continuance. However, with the increased efficiency and number of government schools, the question of the continuance of the day school has already been raised and most agree that its time is short. Yet without doubt, through these few schools, the association has rendered no small service to government education in its pioneer days.

A more distinctive and permanent opportunity is that of night school work. The great demand for trained men has forced students into active life before their education has been completed. The cities are filled with those who wish to improve their position and efficiency by education. The great cry now is for English. It is the language in favor in the Far East. An English night school is often the first work started by the association. Everywhere this has been found an open door of opportunity. The one in Peking has an enrolment of over one hundred and turns away many for lack of accommodation. The clerk comes to better his position, the student to improve his conversation, the official to increase his efficiency. All ranks of society meet each other in such schools. One class in Peking contained a general in the Chinese army, an official prominent in municipal government, a teacher, besides students and telephone operators. Such an intermingling is a real leveling influence. Besides the call for English,

French, German, type-writing, stenography, bookkeeping, arithmetic, etc., find a demand in certain places.

In Korea, the Seoul Association, affiliated with the China movement, is helping a nation industrially bankrupt to develop new trades. Modern carpentry, shoe-making, ironwork, etc., are being taught. This is the only effort of the kind in the country, and has met with such government approval that an annual grant of Yen 10,000 is made. In China no such work has been done heretofore, but at the present writing, the Hongkong Association has plans for doing so.

The Chinese are lecture hungry. Anything which promises light on any of their problems will draw a good audience. Preparation for Constitutional Government, Student Life in America, Evolution, Modern Applications of Chemistry, etc., are typical popular subjects. Many prominent foreigners traveling through China, have been used to bring the best of western thought to the Oriental student. The moving picture machine is sure to overcrowd any hall. The Chengtu Association gave the first such exhibition in the province of Szechuen, an event witnessed by the governor. The exhibit of scientific apparatus in laboratory and lecture, by Dr. Wilson of this association, has done much to open the eyes of the literati of this inland province. The most striking example of the value and demand for lectures with educational value is the present work of Prof. C. H. Robertson, formerly of Purdue University faculty. When he lectures on the gyroscope, has a mono-rail in operation, makes a wheel rise against gravity, and lets anyone in the audience wrestle with an encased gyroscope, the audience is on edge with enthusiasm. This lecture was given a dozen times in Shanghai without diminishing interest. All the officials of Foo-chow turned out *en masse* with their retinues to listen to one of these science lectures and enjoyed much seeing an X-ray picture of the Tartar-general's hand. A wealthy merchant, when explained the nature of these lectures, could not contain his enthusiasm, but danced about the room in his excitement. Professor Robertson has further prepared a number of lectures with practical demonstration on such subjects as Aeronautics, Air as a Lubricant, The Telautograph, Wireless Telegraphy, etc. He is planning to give them himself in the more important centers of China and to further increase their usefulness by training lecturers for smaller cities.

Thus this is no less than a national campaign to furnish a widespread knowledge of the latest applications of scientific investigation. It will do much to enlighten the people, stimulate progress, and reform and open up doors for further approach.

"Put waste paper here," is the sign on large cans which has only recently greeted us in our cities. For centuries baskets for this purpose have been common in China. This is not from a sense of cleanliness as the filth of the street clearly shows, but from the reverence in which any printed or written thing is held. No nation has exalted literature as has China. It is to prevent the defiling of the printed page that such baskets are provided. No wonder then that the publication department of the association has a great opportunity. This is enhanced by the thirst of the student of to-day for good reading pertinent to the problems of the nation and student life. It is hard to conceive of this great craving on his part and the very little there is to satisfy it. Attempting to meet this need in some small measure, there has just been started by this department a magazine called *Progress*. It is published in Chinese and English and aims to bring light and sane judgment on reform, government, social conditions, education, etc., to those who in a short time will be prominent in Chinese affairs. As such, it is unique in journalism in China. *China's Young Men*, the official organ of the Christian Student Movement, already has a larger circulation than any other religious periodical, its number of paid subscribers in 1910 being 6,528, an increase of twenty per cent over 1909, and sixty per cent over 1908. The English edition of the same paper is a fine expression of Chinese Christian thought and is read widely by English speaking students. These three periodicals are edited entirely by Chinese and are each unique in their field. Further, no less than forty books and pamphlets are published including Bible study, devotional and general books, such as "Habit," by James; "Secrets of Success," by Marsden; etc. That there is a marked need for such literature is shown by the total sales of 31,390 copies for 1910, an increase of sixty per cent over the previous year.

For the first time in her history, China's students are gathered in large numbers in the city away from home. One of the great problems arising therefrom has been that of their social life. No people are more friendly, enjoy social times more, have a keener

sense of humor, are better story tellers than the Chinese. The theater is the delight of all. A whole country side will stop work for a week to enjoy a tedious play given by traveling actors, and crowds throng the city theaters. Feasting is very common. As one student said: "My favorite amusement is to eat." It is no uncommon thing to have five or six invitations for an evening. Billiard, pool and bowling halls are very common and much used. All these entail great expense, causing many to live beyond their means, and bring the young man in touch with the worse side of city life. It is a sad fact that immorality is rapidly on the increase. To preserve the good and avoid the evil of all this, the Young Men's Christian Association is providing social centers equipped with billiards, pool, bowling alleys and other games where the surrounding atmosphere is positive and for the good. Social evenings are frequent and the zest with which western parlor games are enjoyed by these orientals would astonish some who have judged all China by the inscrutable laundryman in America. Returned students from America are sounding the cry of the need of extra-curriculum "school life" such as they have known there, and through teacher and social groups, much is being done. Every such effort has met with a ready response.

Goggled-eyed, dignified, stately in tread, unperturbed in demeanor, speaking in aphorisms from the classics, ceaseless in concentration on study—this the old Chinese scholar. What an example of pedantry, of one-sided development he has often been! A change has come now. Go to the city of Tientsin and see five to seven thousand people including many of the leading men and women and even the governor of the province eagerly watching the new students of China from leading schools of the whole province compete in the annual track meet of the Tientsin Association. They sprint, run over the hurdles, put the shot, vault over the bar at a good height, do everything except show the false dignity of the old, and are further gaining strength of body, self-control, cleanliness of habit, sense of good sportsmanship, appreciation of team play, grit, perseverance and the art of success in doing so. In all this athletic life, the association is playing a leading part. In some places like Tientsin it has organized and developed a large share of the interscholastic athletic life of the whole city. Soccer, football and basket-ball leagues have been formed and some atten-

tion paid to regular gymnastics. In Shanghai the success of this last has been marked and a physical director's training class started. A year ago in connection with the Nanking Exposition, a national interscholastic athletic meet was held by the management and school teams from all parts of the Empire participated. The authorities asked the Young Men's Christian Association to direct this feature, an assistance gladly rendered. Co-operation with the municipality in the management of a public playground and athletic field has also been undertaken at Shanghai, a feature which will doubtless be developed in other centers. This message of a strong body is one much needed in China. Too close and long concentration on study for many generations has meant a weak physique and tendency to certain diseases, notably tuberculosis. It was found at Shanghai, that forty per cent of those examined by the physical director had tubercular chests. Enlightenment on hygiene, sanitation, disease, heredity, etc., is a broad field for the physical department. Lectures on Plague Prevention drew large audiences at Shanghai that forty per cent of those examined by the physical were favorably commented upon by the Press. At a student conference near Peking, a talk on *The Physical Results of Immorality* had the closest attention, and was new thought to most present. We remember how in Tientsin, a talk on "Purity," by Rev. F. B. Meyer, of London, was greeted with a smirk and smile at first, which turned to rapt attention and deep earnestness at the end.

Judged from the probable effects on China, the thronging of Chinese to the schools of other nations is one of the most important migrations of history. In 1905 there were no less than fifteen thousand such in Tokyo, a number which has decreased to three thousand since then, a fact due to the withdrawal of short term students, who it is feared received more harm than good, the residue being those taking full courses. As is well known, the unused balance of their portion of the Boxer Indemnity Fund has been returned to China by the United States, and is being used to send students here. This means the arrival of fifty or seventy young Chinese each year to pass four to five years in our schools. Statistics show that there are 725 students here now. A guess would place the total in England and the Continent at five hundred. Here then is a steady number of more than a thousand Chinese students who are in foreign schools and universities. This fact is at

once an opportunity and a duty. At Tokyo, a Young Men's Christian Association for Chinese has been established since 1906, with quarters in the Central Association of that city and a branch at Waseda University. This has furnished a social meeting place for the students, a large night school work has been done, and a successful hostel run. The whole method might be characterized as a Campaign of Friendship. Most striking, however, has been the religious work. This has shown clearly that away from the restraints and prejudices of the homeland and faced with the loneliness and temptations of a foreign city, the message of Christianity is very welcome. A Chinese pastor who has worked there for years says that three-fourths of them favor it. The Chinese Union Church with which the association has been closely co-operating, has received one hundred and forty of these students into membership. What the lives of these educated, intelligent students of good family may mean to China is hard to estimate. For students in America, the Student's Information Bureau, which is prepared to help those going abroad, while not connected with it, yet has quarters in the Shanghai Association building. Parties of students have been met by association secretaries at American ports and every possible assistance rendered. A Chinese Christian Student Federation has been organized in America, which has two qualified Chinese as secretaries. A feature of the work is the holding annually of three summer conferences. It is the object of this work to be a friend to those away from their friends, to bring them into touch with the best of this land that they may return equipped with high ideals as well as detailed knowledge to help solve the problems of their country. And let me add as an exhortation to all interested in these capable strangers in our schools that the universal testimony of those of them who have returned to China is that the greatest thing to attain the above ideal is the influence of the cultured Christian home. They should be given as much chance as possible to get in touch with such.

Before there was a Young Men's Christian Association movement in China, individual student associations had been organized in a few of the mission schools. It is a striking example of the vitality and need of such organization where student control and initiative are given free course that these early associations have lived some for twenty years with practically no outside supervision,

instruction or help. I have in mind an academy in Peking, where an association was organized about 1896, and though receiving no help until within the last few years, yet persisted in its existence in spite of suggestion from teachers that it might be better to unite with a larger church meeting. The little chaps wanted their own society and kept it. At the present time in this student department there are ninety-three associations with 4,459 members. Feeling that besides the curriculum Bible study required in the mission schools, it was necessary to inculcate a love for the personal study as a great help in maintaining a high standard of life, stress has been laid on voluntary Bible discussion groups with emphasis on daily study. To this end much literature has been prepared. For the most part it is translation of Bible study books used in this country and while not wholly suited to the different conditions, yet is far the best of its kind in Chinese at present. Last year there were 2,732 students in 372 classes with an average weekly attendance of 1,806, a proportion of the total field which compares very favorably with the work in America. We know of at least two associations which in spare hours are carrying on small schools for outsiders and records show that ten per cent of the total membership use parts of vacations and holidays to work in street chapels and even for itinerating. Some associations furnish courses of lectures on general topics for the whole student body. A most significant feature of this work has been the holding of six student summer conferences in different sections of China. They have gained in power and usefulness each year. To have students trained in the spirit of service, filled with the high ideals and dynamic of the Christian life, measuring their character and actions by the standards of the Bible to go forth to furnish leadership in China is the object of this department. No work is more important.

We know the force for righteousness in a community that an active church is. It goes without saying that a necessity for a strong, vigorous, wise church is an efficient ministry. At this time in China when the spirit of nationalism is on the increase and young Chinese are taking the lead in every movement, it is of vital importance that highly educated strong Chinese be in the pulpit. Otherwise it will have but little place in the life of the nation. Of great concern therefore, has it been that comparatively

few of the graduates of mission colleges, splendid as has been their service in other lines, have taken up this particular form of work. The great loss in salary and social standing involved largely account for this. It is a thing that thrills our hearts that it is a Chinese pastor, Rev. Ding Li Mei who has providentially arisen to meet this need. He is a man of the spirit and power of Moody, a profound believer and user of prayer and a constant Bible student. He is an example which convinces one that we are waiting for the interpretation of Christianity which the Oriental will give. Giving his time for the past two years to the student department, there have been over seven hundred students who have decided to devote their lives to the ministry. In doing so they take a calling without position in the community, with hardly a living salary, and a task full of discouragements, whereas with their training they could get five to ten times as much salary and occupy honored places as government teachers. Surely much can be expected of men with this spirit of sacrifice and the churches led by them.

Moral and religious changes following the new conditions of society have been marked and serious. The restraints of old religions have fallen off. The true Confucianist has of old looked askance at Buddhism and Taoism and now that western learning has come in, the students regard them as superstitions and the priest a joke. Confucianism is still the heart of the Chinese. The classics are taught in all schools both government and mission and rightly so. As a moral code, they are laudable; as a conservator of civilization, most powerful; as stimulating progress, a stumbling-block; as a religion, agnostic; and as a force to stop the growing immorality mentioned above or to meet any other evil old or new, defective. Writes a Chinese: "The ideal of statesmanship found in Confucianism is not fit for our statesmen of the present day. . . . Confucius did not fight against the corruption of the king of Chi but yielded and left. The Chinese statesmen at the sight of difficulties will ask sick leave; the western statesman will stick to his post." A well known Chinese educator says: "The Chinese students need the gospel of Hope. Teach them that Christ can give them hope for their nation and faith so that they will not give up and will play their part. This is one of the greatest teachings that Christianity can give China." Further the agnosticism of Confucius coupled with science of to-day and a smattering of

Darwin, Huxley, Spencer and Mill has led many into pure materialism. Says one: "The strength of western nations is entirely dependent upon science, and Christianity is simply one means of governing the more ignorant." Finally add a strong prejudice. "Many men connect Christianity with the foreigner and the missionary with his foreign government, we have our religion; why do we want to adopt a foreign one which opposes our customs in every way," are common objections. The above is enough to show the twofold situation of a need for a dynamic which will make moral teaching bear fruit in character and lead men to combat evils in society, and a strong prejudice to be overcome if Christianity furnish that power.

Work for these students has largely fallen upon the Young Men's Christian Association as the form of effort most suited to meet the need. Events of the past few years have given great grounds for encouragement. In spite of prejudice, there is a spirit of inquiry and search. In 1909, a series of lectures on Science and Religion were given in student centers and met with a surprising hearing. At Paotingfu, 800 students in spite of a great cold hall, noisy attendants, smoky lamps and few seats, listened with rapt attention for an hour and a half to an interpreted address on the argument for God as Cause. This spring Mr. G. S. Eddy, accustomed to the Oriental mind by fourteen years in the Young Men's Christian Association in India, gave a series of lectures in a number of cities of China. His audiences were as large as two thousand five hundred and in some cases insisted on protracted meetings. The Shanghai Association has seventy men who are preparing to enter the church as a result of his work. Mention should be made of the author of one of the statements quoted in the above paragraph, an educator, who after years of study and contact with the Tientsin Association became a Christian. The best product of Confucianism together with modern training, he found in this teaching fulfilment of all he had. The reality of his experience, the beauty of his life, his lead in all good things has led above twenty students and prominent men to take the same step. As a result of this, a church supported and controlled entirely by Chinese has been started in Tientsin, a church that during the first six months received twenty-six new members, for the most part of the student class.

Only this past summer there was held near Peking by the Young Men's Christian Association, a summer conference unique in China and as far as I know in any other country. The subject of the conference was Present Day Problems and Christianity. The program was printed in full that there might be no misunderstanding of the purpose of the meeting. Non-Christian students in government schools were asked to spend eight days, a fifth of their vacation, and to give a fee of five dollars (Mexican) merely for the purpose of going to a beautiful Buddhist Temple in the mountains to listen to four hours of lectures a day on Christianity. It was decidedly an experiment, but yet it was felt that the subject would appeal to a good number. Results showed that it did, for there was a total of thirty-eight who came representing twelve different schools. Of these, but six were already Christians. It was felt by the program committee that there were but two points of view from which to approach the subject, one from that of science and the other from that of China's needs. These are undoubtedly the two subjects in which the Chinese students are most interested. So one lecture each day was devoted to "The Modern View of the World," showing the present thought regarding Evolution, Sociology, Psychology, etc., and bringing out clearly that all these at least permit a spiritualistic conception of the universe; and another was given on the "Needs of China," showing Christianity's place in meeting them. Of the remaining two hours one was used in small discussion Bible classes, which proved the most interesting part of the whole conference, questions being frequent and showing thought, and the other to Life Callings, showing what ideals should fill a man in the different occupations that China be most benefited. Clearly it was the idea of service and Christianity as fitting the individual for the highest usefulness that appealed most to these men. The seven who at the conference for the first time took definite Christian stands all bore testimony to this. One of them said: "I know the real need of our nation is the purity of the individual and Christianity can help men to be pure." More striking yet are the words of one of the three representatives sent by the government from suspicion of the revolutionary nature of all student gatherings. He said: "I have heretofore had little use for Christianity. I thought it a religion for coolies. But I have at this conference been much instructed. I have listened

day by day to scholars, and have been much impressed, learning many things. I also have noted the patriotic spirit of the gathering. The sort of Christianity here taught would be a real blessing to China. If such men as these students would accept Christianity and lead the church, the church would be improved and would be a great power in China."

China is awake and stirring. At least a fourth of the world's population is engaged in the tremendous task of adapting a civilization but little changed for milleniums to the new conditions surrounding it and is meeting with wonderful success. When we stop to think that four hundred million industrious, capable, intellectual people are living in a country with vast undeveloped mineral resources and sparsely settled territory larger than the United States, we must ask ourselves, what are the possibilities of such a nation? What may it mean to the whole world to have this people from being a negligible quantity in world affairs turn to helping in the solution of the scientific, economic and religious problems of the day. On the other hand, in this development, should commercialism, selfishness, revenge be the leading motives what problems would be created, what troubles arise! The key to the situation is the young man of China to-day; he decides the question. Bring the best of the world to his attention, show him friendship, help him in all his problems, fill his life with high ideals, instil in him the spirit of the brotherhood of man, ground his character on the rock of true religion and the greatest task of the present day has been done.

MEDICINE AS PRACTICED BY THE CHINESE

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In the preparation of this article I have referred largely to a work entitled "Medicine et Pharmacie chez les Chinois et chez les Annamites" par le Dr. Jules Regnault, A. Challamei, Editeur, Paris, Rue Jacob 17. I have also included notes made from personal observations in Canton, China, and conversations with a Chinese scholar who had read some of the medical classics.

Medicine in China may be divided into two classes,—the purely superstitious, which depends on charms and magic, and the art of medicine, as practiced by the Chinese physician. The former I shall dismiss with a few words. In the City of Canton may be found temples dedicated to the "Spirit of Medicine." In these the ignorant people, especially women, believe that the presiding deity will restore health upon the payment of small sums of money and the performance of certain rites. The Chinese physician, proper, is quite a different individual from the Taoist priest, although magic and astrology do play an important part in his armanentarium. Thus, for example, we read that as heaven has its orders of stars, so earth has its currents of water, and man his pulse. As heaven has twenty-eight constellations called the three hundred and sixty-five orders, so earth has courses of water called lakes, springs, etc., and man has his courses in the pulse,—the three *yang* and the three *yin*. The practice of medicine is unlicensed and is usually hereditary, the skilled physician handing down his secrets to one of his sons. All the efforts of the students are directed to the pulse and the various phenomena revealed by its palpation. There are at least fifty-one variations in the pulse which may be detected and each one indicates some special condition in the body. For simple complaints home remedies and the formulas of old women are resorted to and only when grave symptoms develop is the doctor consulted. In case of warfare the Chinese soldiers attend to their own wounds.

The first authority on medicine in China was the Emperor Chen Song 2737 B.C. who classified about one hundred medicinal plants.

In 2637 B.C. medical science, so far as it had advanced, was written up by another Emperor.

The Chinese distinguish three kinds of practice:—Internal medicine, external medicine and children's diseases.

The drugs and other medicaments are weighed out according to a decimal system as follows:

| | |
|----------------------|------------------|
| 1 tael or leung..... | equals 40.00 gm. |
| 1 tsin | " 4.00 gm. |
| 1 fan | " .4 gm. |
| 1 lei | " .04 gm. |
| 1 ho | " .004 gm. |

The study of human anatomy has been retarded by two factors, —respect for the dead and the lack of any co-operation or organization among the practicing physicians. The body is said to be divided into three parts: (1) The upper, or head; (2) the middle or chest; (3) the lower or abdomen and inferior extremities. Life depends on the equilibrium of the *yang* and the *yin*. It is but one manifestation of the universal life. The whole order of the universe results from the perfect equilibrium of these two factors. The *yang* is the warm principle, the actively flowing and is often symbolized by the sun. The *yin* is the moist principle, passively flowing and is symbolized by shadow. The equilibrium of these two forces constitutes the health of man. If the yang, or active principle predominates there is excitation; if the yin, or passive principle predominates there is depression of the organism. Harmony between the yang and the yin is often represented by two dragons ready to devour one another. The action of these two principles depends on twelve organs: heart, liver, lungs, spleen, left kidney, brain, the large and small intestines, the stomach, gall bladder, urinary bladder and the right kidney. Each of these organs has a canal whereby it communicates with the others. Thus the liver, kidney and spleen are connected with the heart by special vessels; and the vas deferens arises from the kidney. Some of these communicating channels end in the hands and some in the feet. One of the vessels in the little finger is used to determine the nature of most infantile diseases. Six of these vessels carry the active principle yang, and six carry the passive principle yin. These two forces spread through the whole organism by means of the gases and the

blood. The latter makes a complete circulation of the body about fifty times in twenty-four hours. In these fifty revolutions the blood passes twenty-five times through the male channels or those of the active principle and twenty-five times through the female channels, or those of the passive principle. The blood returns to its starting point every half hour approximately, instead of once in twenty-five seconds, according to the teaching of modern physiologists, having traversed a course of some fifty-four meters. The yang is of a subtle nature and resides in the abdomen and six viscera. It has a constant tendency to rise. The yin resides in the brain, the vertebral column and the five viscera and tends to descend.

The viscera of the body are classified under two groups:—the six viscera in which the yang resides and the five viscera in which the yin resides. The six viscera are: The gall bladder, stomach, small intestines, large intestines, bladder and the left kidney, with its three heat centers, the three lumbar sympathetic ganglia. The five viscera are: The heart, liver, lungs, spleen and right kidney. The diaphragm is placed beneath the heart and lungs, it covers over the intestines, spine and stomach. It is an impervious membrane. It covers over the foul gases, not allowing them to rise into the heart and lungs. The stomach, spleen and small intestines are the digestive organs. They prepare the blood which is received by the heart and set in motion by the lungs. The liver and the gall bladder filter out the various humors. The lungs expel the foul gases. The kidneys filter the blood, while coarser material is evacuated by the large intestines. Two substances are found circulating in the body, gases and blood. The former acts upon the latter as the wind upon the sea, the interaction of these two as they circulate in the vessels produces the pulse.

The pulse may be palpated at eleven different points, as follows: Radial, cubital, temporal, posterior auricular, pedal posterior tibial, external plantar, precordial and in three places over the aorta. Usually, however, the physician is satisfied with palpation of the pulse of the right and left wrist. With the right hand he feels the left pulse and with the left hand the right pulse. He applies three fingers,—the ring, middle and index over the pulse and the thumb underneath the wrist. Then he palpates the pulse with each finger successively. Under the ring finger the pulse of the right hand reveals the condition of the lung, middle of chest and the large

intestines, while in the left hand the ring finger determines the state of the heart and small intestines. The pulse under the middle finger corresponds on the right to the condition of the stomach and spleen, on the left to the state of the liver and gall bladder. The index finger placed over the pulse of the right radial shows the condition of the bladder and lower portion of body, over the left radial it reveals the state of the kidneys and ureters. For each of these six pulses the physician must practice weak, moderate and strong pressure, to determine whether the pulse be superficial, moderate or deep. This must be done during nine complete inspirations. If the pulse be rapid the yang principle is predominant, if slow, the yin is predominant. There are twenty-four main varieties of pulse and there are twenty-seven which prognosticate death. The Chinese physician must be trained to palpate the pulse so skillfully that by this single means the nature of diseases and even the month of gestation in a pregnant woman may be determined. Ten or more minutes must be spent in the palpation of the pulses.

Sometimes a Chinese physician will consider other factors. For example it is said that by examination of the tongue thirty-six symptoms may be diagnosed according as the tongue is white, yellow, blue, red or black, and depending on the extent of the coating. From the general appearance of the face and nose the state of the lungs may be discovered. Examination of the eyes, orbits, and eyebrows shows the condition of the liver. The cheeks and tongue vary with the state of the heart, the end of the nose with the stomach. The ears suggest conditions of the kidneys; the mouth and lips the state of the spleen and stomach. The color and figure of the patient also count in a diagnosis. Each organ has its appropriate color. Red corresponds to the heart, white to the lungs, black to the kidneys and bladder, yellow to the stomach and spleen and blue to the liver and gall bladder. Organs also have their own peculiar times and seasons. Thus the heart has red as its color, fire as its element, summer as its season and noon as its hour. It is more likely to be inflamed at noon during the summer season. The elements of nature are supposed to be complicating factors in disease. They are arranged in pairs of opposites thus: active and passive, weak and strong, water and fire, cold and heat.

Auscultation and percussion are wholly unknown as diagnostic aids to the Chinese physician. Entire reliance is placed on palpation

of the pulse and the general facies of the patient, in making a diagnosis. Questions may be asked but only to suggest the remedy required. Often a prescription is given because of the resemblance of the drug to the organ affected. Thus for renal diseases, haricot or kidney beans are given. Minerals are administered as salts. Plants are used in the form of roots, stems, leaves, flowers and dried fruits. The bones of a tiger are frequently ground up and given to a debilitated person. The grasshopper is dried and used as a medicine and the shells of the cicada are collected from the bark of trees and mixed with other ingredients. Tinctures and extracts are prepared from rice wine. Pills are often made with a thick shell of paraffine which is broken off and the contents chewed up. Various forms of plasters and blisters may be applied to the skin. The actual cautery is often used as a revulsive.

The use of the acupuncture needle seems to be seldom resorted to in the neighborhood of Canton. The theory on which it is based is that if one punctures the vessels connecting different organs the disease will be aborted. Three hundred and eighty-eight points suitable for acupuncture are described. Diseases of the liver and the eyes, which are sympathetic organs, are cured by giving pork's liver. In Kwongtung province human blood is considered an excellent remedy and at executions people may be seen collecting the blood in little vials. It is then cooked and eaten.

Diseases are said to be produced by internal and external agents. Among the external influences are: (1) Wind, which causes headache or apoplexy, dizziness, chapping of face, diseases of the eye, ear, nose, tongue, teeth, etc. (2) Cold may cause cough, cholera, heart pains, rheumatism and abdominal pains. (3) Heat causes chills and diarrhoea. (4) From dampness develops constipation, distention of abdomen, watery diarrhoea, gonorrhoea, nausea, pain in kidneys, jaundice, anasarca, pain in small intestines, and pain in feet. (5) From dryness comes thirst, and constipation. (6) Fire causes pain in the sides, diabetes, etc. The diseases of internal origin are classified as disorders of the gases, blood, sputum and depressed spirits.

In the past few years there have been established two charitable institutions in Canton for the treatment of the sick, according to native methods of practice. No surgery is practiced. At one of these so-called hospitals I was informed that bullets were removed

by placing a kind of plaster at the opening of the wound. The ingredients of the plaster have a remarkable magnetic power over the imbedded bullet and gradually draw it out through the same opening by which it entered. My informant had never seen this line of treatment actually carried out, however.

There is a great desire on the part of many Chinese young men to learn the science of western medicine, and in the next few years there will be a demand for thousands of Chinese trained as scientific physicians.

CHINA: GEOGRAPHY AND RESOURCES

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The ultimate greatness of a nation as a political power depends primarily upon its geographical position and its physical resources. Those qualities of racial character that we are apt to think of as the basis of a people's progress, are, in the last analysis, largely determined by physical surroundings; and even a progressive people in a land of scanty resources or of unfavorable geographic position could not hope to attain and maintain the highest stage of national greatness.

What are the actual facts as to the geography of China that justify the current belief that this nation is destined to become a power of the first magnitude? that here in eastern Asia will continue to be enacted some of the greatest and most far-reaching events in national and international affairs? What are its actual resources that give credence to the belief that here the wealth of the world is to be enormously increased? that here will develop a trade and commerce sufficient to bring fortunes to the individuals or the nations that can control it? Be his interests economic, commercial or political, these are questions that should receive first consideration by the student of the Far East.

The Chinese Empire consists of China proper and her four dependencies—Tibet, Eastern Turkestan, Mongolia and Manchuria. China, however, although it has but one-third of the area of the Empire, contains practically all its wealth and population. This article is confined to China itself, referring only indirectly to the dependencies.

I. *Geographical Position*

Isolation.—The fact of greatest influence on China's history is its almost complete separation from the rest of the world, by land and by sea. It is this fact that has made possible the maintenance of its civilization, almost unchanged for over 2,500 years. China faces the Pacific, the largest of the oceans, across whose waters the

small boats of the Chinese could not hope to cross. And even had they crossed, they would have found the distant shores almost uninhabited. On the shore of this ocean there was no other nation, either in the old world or the new, save the small island Empire of Japan, with its kindred people and civilization, which could penetrate to China by sea, bringing new peoples and new thoughts. Chinese influence upon Japan's development was strong, but, until within the last two decades, Japan has had little influence upon the huge Empire of the Chinese.

India, on the Indian Ocean, possessed a great population and an ancient civilization, but the sea voyage even to India was long and stormy, and the way infested by pirates who found ready shelter in numerous islands and bays. The distance from Canton to Calcutta is over 3,500 miles, further than from Philadelphia to Liverpool, so that even with this one other populous section in Asia intercourse was difficult.

As for sea connections with European nations, the way was absolutely unknown until 1498, and the great distance even then shut out Western invasion, save in a very small way, until well on in the nineteenth century. By sea China has been all but completely isolated from the rest of the civilized world.

By land, China is likewise all but barred out from intercourse with the remainder of Asia and with Europe by a system of high mountain ranges, broad plateaus, and sandy desert wastes unrivaled as a land barrier anywhere else on the earth's surface. From the China Sea this triple barrier of mountain, sand and plateau encloses China in a great curve, over 6,000 miles in extent, passing through Indo-China to Central Asia and on through eastern Siberia to the Ckhotsk Sea. The outer edge of this curve consists of the highest and most inaccessible of mountain ranges, the Himalayas, the Pamirs, the Tian-shan, the Altai, the Yablonovyi. From the southern province of Yun-nan to the Dzungaria pass in central Asia, a distance of about 2,800 miles, the lowest passes are over 10,000 feet and many reach 16,000 to 18,000 feet. The lowest passes in the mountains between Burma and southern China are from 5,000 to 7,000 feet in altitude and narrow and difficult. North of the Pamirs the general east-west extension of the mountain ranges gives lower and somewhat easier passes into western Asia. The wide pass of Dzungaria, north of the Tien

Shan Range, has an elevation as low as 5,000 to 6,000 feet. Northeast from this opening, other passes from 5,000 to 8,000 feet in altitude are found leading to Siberia.

The inside of this high mountainous curve is occupied by broad, high, desert plateaus, from 1,500 to 2,000 miles in width, and ranging in height from 9,000 to 18,000 feet in Tibet to 3,000 to 5,000 in the plateau of Mongolia, and crossed by higher mountain ranges. These plateaus are occupied by the Chinese dependencies of Tibet, Eastern Turkestan and Mongolia, buffer states over which China has maintained control as a still greater protection from western invasion. Even without the outer encircling ranges of mountains, this desert plateau in itself would be sufficient to shut out any but the most desultory communications.

Isolation—Present Significance.—The all but complete isolation made by the natural boundaries of China as just indicated have been partly removed in recent times by improvements in transportation. The cutting of the Suez Canal has greatly shortened the route from Europe, and the opening of the Panama Canal will bring eastern America somewhat nearer. The steamship and the railroad have shortened the time of journey by many days, or even weeks, and have brought the products, the peoples, and the ideas of every land to China's doors. China is no longer completely cut off from outside influences. But yet her position far distant from Europe and the Americas and her mountain and desert boundaries, will long continue to exert a great influence upon Chinese affairs and Chinese progress.

In spite of transportation improvements, Shanghai is still forty-five days by sea from western Europe and fourteen days from western North America. In the peaceful pursuits of commerce, although the sea is a connecting highway, these great distances offer barriers to trade in increased freight rates, both for imports and exports, as well as in length of time required for transport. The expense of travel limits both the number of foreign visitors to China and Chinese visitors to foreign countries, thus cutting off one means of acquiring new ideas and progressive methods. This separation may in time prove of benefit to Chinese far eastern trade, in that it will encourage the growth of manufacturing industries in China. When she learns to use her resources of mechanical power and of cheap and efficient labor in manufacturing, the long dis-

tance away of her competitors will be to their disadvantage and to China's gain.

In war, even in modern times, the sea is a most effective barrier. It is true that China presents 2,100 miles of seacoast open to attack from foreign navies. But these navies, when in Chinese waters, are far from their bases of supplies. In the event of a war of conquest, involving the transportation of large armies, the thousands of miles of sea between China and the great powers of Europe will prove scarcely less effective as a protection than they have in the past.

"It is this limited capacity of navies to extend coercive force inland that has commanded them to the highest political intelligence as a military instrument mighty for defence, but presenting no menace to the liberties of a people."¹

In peace and war, the land barriers must always remain effective. Great Britain in the south and Russia on the north have extended their dominions to the mountain circle that forms the outer bulwark of China's natural defences; and here they have stopped. Not only do the high mountains and plateaus oppose further conquest, but the desert lands are hardly worth the taking. Yet it is almost certain had not the mountains intervened, those two powers would have extended before this their borders to, if not within, China itself. This, in fact, is what Russia nearly accomplished in the only weak point in the mountain barrier, namely Manchuria.

Manchuria alone, of all the land boundaries of China, can be regarded as at all open. The Manchurian plain, rich and fertile, opens readily into northern China and the mountain divide separating Manchuria from Siberia is relatively low and easy of passage. It is from this direction that Russia has stretched forth her conquering arm, taking possession of all the northern half of the Amur valley and reaching down the Pacific coast to Korea. She was finally entrenching herself in all of Manchuria when forced to loosen her hold by Japan. Here alone, by means of the Siberian Railway, is China directly connected by land with Europe, and here has her territorial integrity been most threatened. The retention of Manchuria by China is a vital necessity to maintain protection along her land frontier.

¹ Mahan, A. T., "The Problem of Asia," p. 42

Except for the Siberian Railway, the mountain-desert barrier has kept from China any international railways.² In Burma and India many roads reach up to the base of the Himalayas, while in Turkestan the Russians have penetrated to the Pamirs with their railroad lines, but none have yet crossed. Both the lack of resources in the central Asiatic plateaus and difficulty of construction over these high ranges will undoubtedly long prevent any such extension.

Accessibility—Seacoast and Harbors.—The preceding section has emphasized China's isolation and its effects both past and present. Turning to the other side of the question, to what extent do physical features make China accessible to modern trade and commerce?

The prime requisite for the growth of a modern nation is ready access to the sea. China's seacoast extends over 2,000 miles, following the main outlines of the coast; or, including the minor depressions, over 4,500 miles. But this long seacoast presents but comparatively few good harbors. Remarkably free from deep indentations, it encloses all of eastern China in a single great curve, convex to the east, and broken only where the Shan-tung peninsula projects eastward toward Korea in the north, and the Lei Chau peninsula reaches toward the island of Heinan in the south. These projecting peninsulas form the only large inclosed bays along the China coast, the Gulf of Pe-chi-li and the Gulf of Tongking. The largest depression in this great curve is Hang-chow Bay, at its most eastern edge. And this bay is but sixty miles wide, extends inland about the same distance, and is too shallow for large ocean-going vessels.

The northern coast, north of Hang-chow is especially deficient in harbors. Except for the Shan-tung peninsula, it is made up of alluvial material brought down by the two great rivers of China, and has, therefore, a low, flat, swampy shore, straight and regular and gradually advancing seaward. Off shore it is very shallow and filled with shifting sand bars. Ten miles off the coast of Chi-li water is but twenty feet deep, and, moreover, is obstructed by ice during the winter months. There are no harbors worthy the name on the Gulf of Pe-chi-li nor along the coast south of the Shan-tung promontory. Shanghai is situated on the Wang-poo River, a short

² A short line from Hanoi in Annam into the province of Yun-nan, is an international railway, but it does not cross the mountain barrier.

tidal tributary near the mouth of the Yangtze. The Yangtze enters the sea in a great estuary sixty miles wide, but filled with islands and shifting channels, and constantly threatening to silt up the entrance to Shanghai whose connection with the sea is maintained by artificial means. Passengers and cargo sometimes have to be unloaded at the Woosung Bar, at the mouth of the river, and taken by barges fifty miles up to Shanghai. Its existence as a great port is due entirely to its position at the mouth of a great navigable river. It is the only port in China that has good natural access to the interior.

The Shan-tung peninsula only, in all of the northern coast of China, has a few good natural harbors, due to the fact that here the mountains reach the sinking seacoast forming a series of bays and protecting headlands, but these harbors have no natural connections to the interior. The two best have been taken possession of by foreign powers. Wei-hai-wei, a large protected harbor with a depth of forty-five feet, was leased by Great Britain in 1898, and Ts'ingtao, on Kiaw-chau Bay, one of the largest and best harbors in the East, was taken by Germany in the same year. The Chinese treaty port of Che-foo possesses a large and deep harbor.

South of Hang-chow Bay, the coast, like Shan-tung, is formed by the depression of a mountainous region and possesses several good natural harbors, but, also like Shan-tung, they have poor access to the interior. Foo-chow, Amoy, Swatow, Hong Kong, and Kwang-chow-wan are all good harbors, capable of receiving the largest ocean vessels. Canton cannot receive ships of over ten feet draught, while Macao is fast silting up.

Navigable Streams.—Not only is China's coast free from deep indentations that allow penetration of the sea inland, but its rivers, with the notable exception of the Yangtze, are unnavigable by ocean-going vessels except in their lower courses. The mighty Hwang-ho is used only by junks, even in its lowest courses, due to bars at its mouth and sands in its channels. Above its entrance to the highlands, it is unnavigable even for junks.

The Si-Kiang in the south is navigable only to Wu-chow for vessels of less than six and one-half feet draught, a distance of about 125 miles. Small boats and barges, however, can go far up its main stream as well as its tributaries.

It is the Yangtze that opens the interior of China to the sea.

Ocean-going vessels drawing sixteen to eighteen feet of water come to the wharves at Han-kow, 680 miles from the ocean, into the very heart of China. River steamers can proceed 370 miles further, to Ichang where the gorges of the Yangtze seriously hinder navigation. These gorges are navigated, however, with difficulty by large junks to Chang-king (400 miles), and small junks go on even to Ping-shan, 1,750 miles from the mouth. A small, specially-constructed steamboat now makes regular trips from Ichang to Chang-king through the gorges. Small steamers navigate the Han for three hundred miles northwest from Han-kow. Even in the Yangtze navigation by the large ocean going vessels is prevented in the dry winter season, when not over six feet draught boats can be taken up the river. At all seasons, shifting sand bars are a serious evil. But in spite of these handicaps, the Yangtze is the chief natural instrument for making the interior of China accessible to the outside world. Here commerce and industry are gaining firmest foothold. The fact that the present revolutionary movement has had its origin in the Yangtze Valley and has here gained its strongest support is significant of the openness of this central valley to outside influences.

Accessibility by Land.—In the description of China's land boundaries their isolating effects were noted. But in spite of these effective barriers China has long continued to hold some intercourse with the rest of Asia. Immigrations from the West were the beginnings of her civilization; her religion has come from India, as witnessed by the Buddha worship; Christian missionaries from Europe established the church in China in the middle ages; Chinese goods found their way to Europe in very early times; and some degree of commerce is still maintained across the deserts and mountains.

The early peoples bringing Chinese civilization undoubtedly came from western Asia, passing along the Tarim Basin or through the Dzungaria pass north of the Tian Shan, thence along the northern edge of the Nan Shan to the valleys of the Wei-Ho and the Hwang-Ho. This is the easiest of the routes between the East and West and has long been the line of a small caravan trade. It is very long, however, the distance from Kan-su province to the plains of Turkestan being 2,500 to 3,000 miles and it traverses a high, cold, desert region.

From Pekin northward a long but easy pass leads through Kalgan to the Mongolian plateau, 5,000 feet above sea level; and followed now by the recently completed railroad to Kalgan. Here begin two long caravan routes to Siberia, one leading to the Lake Baikal district, crossing the high desert; the other, after crossing a rough and sandy region for more than a thousand miles, passes north of the Altai mountains and reaches the headwaters of the Irtysh River in Siberia through a snow-covered pass 8,000 feet high.

Connection with Tibet and Burma in the southwest is maintained through very high and difficult passes. From Cheng-tu, the capital of Sze-chuan, a trade route leads to Lhasa in Tibet over three mountain passes, up to 10,000 feet in height; and from Kan-su province, a still more difficult route reaches the same destination over passes as high as 16,000 feet. From Lhasa a high, but not so difficult, way leads into India.

Between Yun-nan and Burma a high and deeply dissected plateau, fever-infested, makes progress very difficult. The valleys are cut in this plateau from 3,000 to 4,000 feet below the general level of the region and extend north and south across the line of travel, but a trade route, possible only for pack-laden coolies, crosses from Yun-nan to the Irawadi, in Burma. In Burma, a railroad now extends toward China for 150 miles northeast of Mandalay, and it has been proposed that this line be extended connecting Yun-nan with Burma. The physical difficulties in the way of such a road, while probably not insurmountable, are exceedingly great, and would involve an enormous expenditure. The construction of such a railroad is probably very far in the future. The only way that these highlands of southwest China are less effective than the rest of the land barriers lies in the fact that they are narrower and a trade route here would connect the two most densely populated regions of Asia and furnish an outlet of China's wealth into Indian ports. But even modern engineering skill hesitates to assume the task that would be involved in constructing a railroad on this high and deeply dissected plateau. Political reasons only, if any, will have weight in bringing about its construction.

II. *Physical Features and Resources*

Surface Form—Mountains.—China is essentially a mountainous country, rough, rugged and high. It consists for the most part

of ancient crystalline and sedimentary rocks that have been faulted, folded and worn down by the forces of erosion, only to be again uplifted or deformed and dissected by the streams into valleys, deep, steep-sided and narrow. Only where recent deposits of wind- or water-borne silt have filled up the irregularities of the surface are level areas to be found, as in the loess-filled valleys of the northern provinces or in the delta deposits at the mouths of the rivers. Less than one-fifth of the area of China is under 1,000 ft. in altitude, and most of this is in the great delta plains of the east and north-east. The average elevation is estimated at 1,500 ft., as compared to 500 ft. for the United States, and 300 ft. for Great Britain.

The northern and western edges of China are in the high plateaus and mountains of central Asia. Two-thirds of the great province of Sze-chuan comprises the inaccessible mountains, bordering on Tibet, and reaches altitudes of from 10,000 to over 16,000 ft. Much of Yun-nan and Kan-su are likewise situated, while the northern portions of all the northern provinces lie on the high edge of the Mongolian plateau.

The descent from these highest plateaus to the south and east is often abrupt, the line of separation being in many cases great fault escarpments. But instead of leading down to low plains the descent generally is to a rugged plateau and mountainous region, from 1,500 to 6,000 feet in height, which covers the remainder of the area of China to the very ocean's edge, except where interrupted by the delta plains of the Hwang-ho and Yangtze.

Plains.—The Great Plain of the northeast, forming a great half circle with the Shan-tung peninsula at its center, and the extensive flood plains of the lower Yangtze constitute the only large plain areas in China. Though large in themselves, these plains occupy scarcely one-eighth of China's surface. Elsewhere only narrow flood plains or small deltas relieve the usual monotony of slope and mountain ridge. The northern or Great Plain consists for the most part of the fertile Hwang-ho delta, reaching inland for 400 miles. North of this delta the plain is of marine origin, covered with alluvium from the mountain streams. The Yangtze plains extend inland in a series of silt-filled basins for 600 miles, separated from each other and from the northern Great Plain by ranges of hills and mountains. These two plains coalesce, however, in the east, so that a continuous wide plain extends from

Hang-chow to Peking, a distance of about 750 miles. Ichang, at the head of the Yangtze plains, 1,000 miles up the river, is but 130 feet above sea-level.

Low and flat, these plains are covered with many large lakes and swamps. The rivers, flowing across them in beds higher than the level of the plains, are held in by great embankments, sixty feet high in places, but subject to frequent overflows in time of flood that cause enormous losses to life and property. But the soil is rich and inexhaustible, the surface easily tilled and well watered and capable of yielding enormous crops. These extensive plains, equal in area to the combined states of Ohio, Indiana, Illinois, and Kentucky, constitute the great agricultural resource of China. They now support an enormous population, fully forty per cent of China's total, though constituting but one-eighth of its area, and furnish foods and raw materials for export. Control of the devastating flows would enormously increase their wealth-producing ability.

Climate.—Although occupying a latitude corresponding to that between New York and Santiago de Cuba, China has a climate with a lower average temperature and greater seasonal extremes than are found in these same latitudes in America. High altitude, combined with close proximity to the extensive high plateaus of central Asia, with their great extremes of heat and cold, largely account for these conditions. Frosts occur in practically all parts of China, and snow occasionally falls even in Canton, within the tropics. Everywhere there is a distinct change from summer to winter, much less marked in the central and southern provinces, which are without great temperature extremes, but very decided in the north, where the winters are long and severe and the summers warm.

Under the influence of the monsoons China has an abundant summer rainfall. Although decreasing in amount in the west and north, no section has less than twenty inches of annual rain, most of which falls during the growing season, when it is of greatest benefit to agriculture.

Geographic Divisions.—China may be conveniently divided, for purposes of regional study, into three divisions—northern, central and southern China—partly on the basis of physical features, partly because of climatic differences. Northern China is occupied by the

drainage basin of the Hwang-ho, and is separated from central China by the high and inaccessible Tien-shan in the west, and the lower mountains which continue the divide eastward nearly to the coast. Central China corresponds in general to the basin of the Yangtze, while southern China occupies the wide, mountainous plateau that stretches in a wide belt across all of southern China, and which is drained in its northern part by the Si Kiang. Many intersecting mountain ridges divide all these divisions into smaller, well-defined sub-divisions.

Northern China.—The western and northern parts of this section consist of high plateaus, sloping south and east and crossed by deep gorges. In a great semi-circle around the base of the plateau rise the mountains of southern Shen-si and eastern Shan-si, in a northward and westward facing fault escarpment over 4,000 feet high, inclosing the basins of the Wei-Ho and Fon-Ho, and forming a barrier of the first magnitude to the descent from the high plateau. This barrier is broken through only by the Hwang-Ho when it abruptly turns to the east in a narrow, unnavigable gorge that offers very limited connection between the interior valley of the Wei-Ho and the Great Plain. East of these mountains extends the Great Plain, followed by, and partially surrounding, the dissected mountain mass of Shan-tung.

In spite of this variety in surface form, northern China possesses many features in common. It is distinct from the rest of the country in climate, soil, agricultural productions and people.

Climate.—In this northern section are the greatest extremes in temperature to be found in China, less marked in the Shan-tung region, most decided in the extreme north and west. Winters are cold, rivers are frozen over for several weeks, cold west gales sweep over the plains, and agricultural activities cease. Temperatures of 5 degrees below zero (F.) have been recorded in Peking, while the January mean is 23 degrees. The summers, however, are warm, the July average being 79 degrees, with recorded extremes of 105 degrees. But the rains are less than in central and southern China. The annual rainfall of the Shan-tung peninsula and of Peking is about 24 inches. The northern provinces are in the boundary zone separating the humid monsoon regions from the arid interior, and a slight decrease in the annual rainfall or delay in the coming of the summer monsoons, may bring failure in crops and famine.

These crop failures in the western province seem to be increasing in number and severity, due in part, at least, to the fact that the mountains, completely deprived of their forest covering, are no longer able to hold the moisture. The mountains are characteristically bare, brown and gashed with soil-destroying gullies.

Soil.—The most important resource of this northern basin is the loess soils, known to the Chinese as "Hwang-tu," or "yellow earth." Loess deposits occupy most of the Great Plain of eastern China, but in the mountains it occurs for the most part only in valleys or isolated basins. Sometimes it is found high up on the mountains.

Sorted and transported repeatedly and alternately by winds and waters, the material (the rock-waste from which loess is formed) came to consist in great part of fine dust, the loess, which both agents could carry in largest amount; but this was always mingled, as it is now, with some coarser sand and gravel introduced by flood waters. Beyond desert basins, the path along which the Huang-tu was distributed was chiefly down the valleys of a previous physiographic epoch, as it is now down the valleys of the present far more mountainous surface. It was deposited on flood-plains and in lake basins. The lighter portions of it were blown out onto mountain slopes and gathered beneath wind eddies or in sheltered hollows. In course of distribution it became thoroughly decomposed and oxidized; and where it accumulated and was exposed to subaerial conditions it acquired vertical cleavage, a secondary characteristic due to gravity and movement of ground waters, and became charged with salts brought in by such waters. The process of transportation and accumulation are in progress now and are believed to have been similar in past ages.²

Streams and roads have often cut deeply into the thick loess deposits, and, bare of forests, it is being rapidly carried away by the forces of erosion. Original level surfaces are, therefore, now often rugged, and not easily tilled.

Its indestructible fertility is dependent upon a sufficient water supply, and its surface being above the level of the streams is incapable of irrigation. With increasing forest destruction and possible decrease in rainfall, crop failures and famines have become more common, even in the loess-covered provinces.⁴

Agriculture.—Agriculture is largely restricted in the mountainous sections to isolated loess-filled basins. The Wei-ho and Fon-Ho valleys are rich in agricultural resources and support a dense popu-

² Willis, Bailey. "Research in China," pp. 184-5.

⁴ Little, A. "The Far East," p. 26.

lation, but it is the Great Plain, with its loess-covered soils, level surface and summer rains, that forms the chief crop-growing region. Most of the mountain provinces can barely supply the needs of their own people, and are thinly populated, but the Great Plain has food to spare beyond the needs of its own exceedingly dense population.

Lower temperatures and rainfall give northern China a distinct type of agricultural productions. Rice is not grown to any extent north of the dividing ranges. Some is grown in the milder and moister southern Shan-tung province and northern Kiang-su, but it is not the staple crop. The chief food crops are barley, wheat, millet, maize, peas, beans and fruit. Opium is extensively grown in all the provinces, but especially in the mountainous ones of the north and west, where, because of the ease of marketing a crop of high value and little bulk it serves the most satisfactory money crop for the isolated mountain-valley farmers. It answers the same purpose that whisky did in the early days in western Pennsylvania.⁵ Cotton, hemp and tobacco are grown to a considerable extent, and, especially in the eastern provinces, silk. Considerable grazing is carried on in the mountains of Shan-tung and Chi-li.

Short seasons restrict agriculture to one crop per year in most of northern China. In a limited area of the Wei valley two crops are grown, and also in the extreme southern part of the Great Plain.

People.—The isolated position of Shen-si, Kan-su and Shan-si largely accounts for the strong anti-foreign spirit of their peoples: their conservatism, ignorance and fanaticism. The Boxer troubles of 1900 had their strongest support in these provinces, and here the outrages against foreigners were most marked. Here at Si-nan, in the isolated valley of the Wei, the Imperial court sought refuge. In the present revolution outrages against foreigners have been frequently reported from here, while in other sections there has been comparatively little molestation of strangers.

The people of northern China are larger and more sturdy and robust than the people of the south. This is largely due, probably, to the frequent invasions of the sturdier northern races into this section, and their absorption by the Chinese. But the dry, cool and invigorating climate has undoubtedly also contributed to this superior physical robustness.

⁵ Ross, E. A. "The Changing Chinese," p. 150.

The early civilization of China was long confined to this region, after entering the valley of the Wei. The mountain borders on the south prevented migration in that direction, and the fertile soils of Shan-si and the Great Plain drew them to the east. Crossing the plain to the higher peninsula of Shan-tung, with its many fertile valleys and mild and more equable climate, the growing race here "attained its highest development, and produced, in the seventh and sixth centuries before our era a school of philosophers worthy to rank with their contemporaries in the West—in India and in Greece."⁶

Central China. The Yangtze Valley.—The southern boundary of this division is not well defined. Many of the southern tributaries of the Yangtze penetrate far into the plateau of southern China, while in the west, in Yun-nan, this plateau is crossed by the Yangtze itself.

The Yangtze Valley is often compared to the Mississippi. The comparison holds to only a limited extent, and fails in many important particulars. Both in length and volume of water the two rivers are comparable, both open up the heart of a great country, both present many of the same problems of control and navigation. But while the Mississippi River and its tributaries flow practically throughout their whole extent across great plains, the Yangtze flows across mountains and plateaus, and two-thirds of its course is in deep gorges, in which the valley is scarcely wider than the stream bed.⁷

Leaving the high plateaus, the Yangtze flows in a deep gorge along the southern edge of the Red Basin, and not until it leaves the gorges at Ichang, at the beginning of the lower third of its course, does it enter a valley plain, and this plain is comparatively narrow, and hemmed in by mountains. It consists of three silt-filled basins, together with the present delta, swamp and lake covered, and subject to destructive floods. Although covering a somewhat larger area, these plains are comparable only to the Mississippi flood plain and delta.

The Mississippi Valley occupies a single great plain in which communication is easy by land as well as by water, and in which no section is separated by natural barriers from other sections. The

⁶ Little, A. "The Far East," p. 23.

⁷ *Ibid.*, p. 57.

Yangtze Valley is divided into three main divisions, separated from each other by effective barriers: 1. The alluvial plains, occupying the lower course of the river. 2. The Red Basin, separated by difficultly crossed mountains from the alluvial plains and other parts of China. The gorges of the Yangtze not only hinder navigation between these divisions, but are too narrow for roadways. Ten per cent of the junks attempting to go up the gorges are lost.⁸ 3. The high mountains and plateaus of western Sze-chuan, practically uninhabited, except in a few isolated inter-mountain valleys, and, except in minerals, making no contribution to China's wealth. A fourth isolated basin with rich soils is found in the upper course of the Han River, between the two high ranges of Tsin-ling and Ta-pa-shan.

Climate.—The climate of this central section is milder in temperature, and has a greater rainfall than the northern provinces. Terraced cultivation is, therefore, common. Rice is the chief food crop, while cotton, tea and silk come to be very important. Two to five crops are grown yearly where one crop is the rule in the north. The eastern provinces more resemble in the summer and winter changes of climate the northern provinces. In the mountain-protected Red Basin of Sze-chuan, the climate is distinctly sub-tropical. Frosts are unknown in the valleys. Fogs and cloud are so usual that the saying has become common that when the sun shines in Sze-chuan the dogs bark.⁹

Agriculture.—The Red Basin and the alluvial plains are both important agricultural sections. Both sections raise practically the same crops, rice being the staple. Tea, cotton and silk are also very important. Sugar, oranges and other sub-tropical products are raised in the Red Basin, as well as in the eastern provinces. In the mountains of the far west herds of sheep, goats and yak are found, while buffaloes and ponies are on the lower lands.

The Red Basin of Sze-chuan is a region of exceedingly fertile soil and a dense population, isolated from the rest of the country, and 1,500 miles in the interior of China. Containing an area of about 70,000 sq. miles of red sandstone, from which it derives its name, it is an anciently filled lake basin, which has been elevated and dissected by streams into a succession of steep slopes, deep

⁸ Manifold, C. C. "Recent Exploration and Economic Development in Central and Western China." *The Geographical Journal*, Vol. 23, p. 286.

⁹ Little, A., "The Far East," pp. 72, 123.

ravines and flat-topped hills. These hills are terraced to their very summits, and the fertile soil, abundant rains and mild climate produce several crops per year.

While all the basin is extremely fertile and to the patient Chinese yields abundant crops, the northwest corner contains one of the most remarkably fertile agricultural sections in the world. This is the plain of Cheng-tu, a drained and level lake basin, containing an area of about 2,800 sq. miles, but supporting a population of between 4,000,000 and 5,000,000 people—from 1,800 to 2,000 per sq. mile. A remarkable system of irrigation, begun 250 years, B.C., takes the turbid and turbulent waters of the Min River, spreads them over the plain in an intricate network of canals, and furnishes abundant water for irrigation and soil fertilization at the same time that it dissipates the otherwise destructive flood waters. From five to seven crops are said to be grown each year on this small area.¹⁰

People.—The population of Sze-chuan is about 60,000,000, a great part of whom are in the Red Basin, making this region one of the most densely populated regions in the world. Over-population results in appalling poverty, and there is considerable migration to the less densely inhabited provinces to the south.

In spite of its isolation, the people of Sze-chuan are progressive, quick to adopt western ways and ideas. Its capital, Cheng-tu, possesses many fine schools and public buildings, and is rapidly introducing modern improvements.¹¹

Southern China—Surface.—Except for the narrow valley bottoms and small deltas of its streams southern China is uniformly a high, dissected plateau and mountainous region. As here defined, it includes all the broad plateau south of the main Yangtze Valley, the southwestern province of Yun-nan, and the basin of the Si Kiang. Highest and most rugged in western Yun-nan, which is a part of the great Tibetan plateau, it maintains a general altitude from the base of this plateau to the ocean of from 2,000 to 5,000 feet. A few low passes allow communication between the Si-Kiang Valley, and the Yangtze, the most important of which, historically, the Mei-ling or Plum Tree Pass, north of Canton, is but 1,000 feet in altitude. One hundred miles east of this is a second

¹⁰ Ross, E. A., "The Changing Chinese," p. 302.

¹¹ Ross, E. A. *Ibid.*, p. 303.

pass, through which water connection between the two river systems is maintained by a short canal, and through which will go the proposed railroad from Han-kow to Canton.

Isolated in this mountainous region from the outside world and from each other, the inhabitants of southern China, except in the open and accessible region about Canton, are among the rudest and least educated in China. Here will be found many of the aboriginal Chinese people, maintaining their old customs, violently opposed to governmental control, turbulent, anti-foreign in feeling, constantly fomenting revolution and strife. Here the Tai-ping rebellion had its origin, and again and again these southern provinces have revolted against Manchu rule and foreign influences.

Climate.—Southern China, on account of its altitude, has a cool, sub-tropical climate. Winter frosts occur in practically the entire area, snow sometimes falling, though rarely, even in Canton, within the tropics. But winters are everywhere mild, even in the cooler sections of the west, while the influence of the sea gives the eastern provinces a still more equable climate, with tropical summers. Rainfall is abundant, falling throughout the year, but principally during the summer monsoons. Along the coast the annual average is eighty inches and over, decreasing to the west to forty inches and less.

Agriculture.—Adapted climatically for the growing of a wide range of temperate and sub-tropical crops, agriculture flourishes in the valley bottoms, and extensive hillside terracing has partly overcome the disadvantages of rugged surface. Most of the provinces, however, with difficulty produce food for their own people and this lack of agricultural resources has resulted in relatively sparse populations in many of the southern provinces. Kwang-si is the least densely populated province of China, about sixty-six to the square mile. On the other hand, Fokien, in spite of its inaccessible mountains, maintains a very dense population because of its rich soils, heavy rainfall and elaborate hillside terracing.

Rice is everywhere the most important crop, both east and west, and wheat, barley, maize, opium, tea, sugar cane, tobacco, silk, spices and fruits are almost universally grown. Tea, silk and cotton are grown most abundantly in the east; while opium, with grains, is the leading crop in the west. Grazing of ponies, mules, cattle and sheep is largely carried on in the western provinces,

which are adapted to agriculture only in a few small and isolated valleys.

Forest products and timber constitute an important source of wealth in the mountainous provinces between the Yangtze and Si-Kiang and in Yun-nan, for here preserved in the distant or difficultly accessible mountains, are practically all the forests that are left in China. Great rafts are floated down the rivers to Canton, Shanghai and Foo-chow. The forests are rapidly disappearing, and it is a matter of but a short time when these last remnants will have disappeared.

Agriculture must remain at a great disadvantage in southern China, although undoubtedly the western provinces, especially Yun-nan, are capable of great improvement. Emigration from other crowded provinces, especially Sze-chuan, to this region, is already taking place. In the east, however, especially in Fokien and Kwang-tung, the land is unable to support its over-crowded population, and emigrations in large numbers are taking place to the Straits Settlements and elsewhere.

Mineral Resources.—Lack of detailed information makes an account of the mineral resources of China unsatisfactory. Except in a few localities, trustworthy investigation of mineral deposits has not been made. That China is immensely rich in minerals, however, can be asserted with confidence. Its geologic history—the formation of its ancient rocks and their transformation into mountains—furnished the conditions favoring mineral deposition, while subsequent denudation and dissection of the mountain masses have made them accessible. There is no province in China that does not possess valuable minerals. Coal, iron and copper—the three minerals of greatest economic value to a modern nation—are especially abundant, while the minor metals—tin, lead, zinc, antimony, mercury, gold and silver—are known to occur in considerable quantities. Scientific surveys are almost sure to reveal mineral deposits now unknown even to the Chinese. The Chinese themselves have long mined their minerals in crude and primitive ways, but no attempt has been made to exploit the resources, even for supplying their own immediate needs. Although a coal and iron country, China is a large importer of both minerals, her exports of coal in 1905 being less than one per cent of her imports, and of iron, less than one-sixth of her imports. Copper also is imported to a considerable extent.

Coal.—Coal is found in varying amounts and qualities in all of the eighteen provinces, but the largest field is in northern China, the Shan-si field, occupying the province of that name, but extending into the neighboring provinces of Ho-nan, Chi-li, Shen-si, and even to Kan-su. Like most of the known coal deposits of China, this field is in carboniferous strata, the great coal-bearing formation practically of all the large coal fields of the world.

The oft-quoted estimates of Richthofen give this field an area of 30,000 sq. miles, consisting of beds twenty to thirty-six feet in thickness, the eastern half of anthracite coal, the western of bituminous, extending in horizontal strata across the Shen-si plateau, "sufficient to supply the whole world for thousands of years." According to these estimates, the anthracite deposits of Shan-si would be infinitely larger than those of Pennsylvania. Bailey Willis,¹² of the United States Geological Survey, however, in more recent researches in this region, raises the question of the horizontality of these coal-bearing rocks. If folded, as his observations indicate, the coal measures would occur only in "more or less restricted synclines" or down folds of the rock, somewhat as the coal occurs in eastern Pennsylvania, and the amount of coal estimated by Richthofen, on the basis of the beds being level and undisturbed, would be very greatly reduced. Until further investigations are made, the amount of coal must remain unknown. Though very large they are probably much less than originally estimated.

Upraised from 2,000 to 3,000 feet, these coal measures outcrop around the eastern edge of the Shan-si plateau, allowing mining into the side of the plateau, and furnishing easy means of transportation to and across the plains at its base. Two railroads already extend from the main Pekin-Hankow Railroad westward into this field—one to central Shen-si, the other to northern Ho-nan. In 1906, Shan-si produced 3,000,000 tons of coal.¹³

Near Pekin occur several small coal fields, accessible both by railroad and by sea that have been quite extensively worked for several years by modern methods. Coal here is both bituminous and anthracite. These fields produced in 1906 2,200,000 tons of coal. In 1910 the first cargo of coal and coke from one of these fields was shipped to San Francisco in the attempt to create a market for Chinese coal on the western coast of America.

¹² Willis, Bailey. "Research in China," p. 175.

¹³ Estimate by Prof. Drake, Imperial University of Tien-tsin. Quotation in *Scientific American*, vol. 99, p. 286.

The Shan-tung peninsula contains several small coal fields that are now being operated by modern mining methods. Coal here is of rather poor quality, friable and smoky.

Next in importance to the Shan-si coal field are the fields of southern China, centering in Hu-nan. The coal fields of Hu-nan are said to cover 21,000 square miles, and consist of coking and non-coking bituminous and of anthracite. Coal from the numerous native workings and from government coal mines is readily transported by barge to the Yangtze, to Han-kow and, especially the anthracite, to Shanghai. Four to five million tons, mostly anthracite, are reported to be sent from this province to Hupeh annually.¹⁴ In eastern Kiang-si coal is now mined for supplying the government iron works at Han-kow. Coal and coke are taken by railroad from the fields seventy miles westward, to barges on the Siang River, and thence to Han-kow. In quality the coal of this region appears to be much inferior to that of Shan-si, and very much less in amount.

The populous province of Sze-chuan is underlaid by coal. The coal is exposed in the gorges of the Yangtze, and its affluents, where these cut through the cross ranges. It, as well as iron, is largely mined through adits run into the mountain side, in the primitive but effectual Chinese way, and forms the staple fuel of the country.¹⁵ It is used only by the natives, however. Steamers on the Yangtze are supplied with Japanese coal.

Yun-nan, Kwei-chow and Kwang-tung contain scattered coal fields of unknown amounts, as also the hills in southern Ngan-hwei, and, in small amounts, all the other provinces.

Iron.—Like coal, iron is widely distributed, and often occurs closely associated with coal. Shan-si contains abundant deposits in the coal fields, and has long been smelted by the natives in crucibles in open furnaces. This region supplies nearly the whole of north China with the iron required for agriculture and domestic use,¹⁶ and the total amount smelted in the crude Chinese furnaces is probably very large. The coal fields of Shan-si are underlaid with limestone. Thus there are provided in large quantities in this one province the three raw materials necessary for the smelting of iron.

The provinces of Ho-nan and Kiang-si are rich in iron ores in

¹⁴ Broomhall, M., "The Chinese Empire," p. 173.

¹⁵ Little, A., "The Far East," p. 67.

¹⁶ *Encyclopedia Britannica* (1910), article, "China."

close proximity to coal. In southern Ho-nan excellent steel is made and exported, while ore is carried to the government steel works at Han-kow by barge. Already iron ore and pig iron have been shipped from the Han-kow district to the United States, while regular shipments are sent to Japan. The iron ores of this district are made easily accessible because of the navigable Yangtze and its tributaries.

Sze-chuan, Yun-nan, Shan-tung and Kwang-tung likewise are rich in iron, and furnish most of the iron locally used.

Copper and the Minor Metals.—With the exception of iron, the metallic minerals occur most abundantly in the southern plateau, especially in the western half, practically all the metals of economic importance being found here. Very little modern development has yet taken place, but the primitive Chinese methods are producing a considerable quantity. The mineral resources of southern China will probably come to be its greatest source of wealth.

Copper is found to be especially rich in Yun-nan and Kweichow, and considerable mining is there done to secure the metal for coining the Chinese "cash." Tin is also abundant and, in spite of primitive mining methods and long distances from the coast, there was exported from China in 1910 over 4,500 long tons of the metal.

Antimony seems to be very abundant in Hu-nan and Kwang-si, and already a considerable export—8,000 tons of the metal—is sent from this section. Mercury is the chief source of revenue for Kweichow, which contains probably the richest fields of this metal in the world. Lead and zinc are very common in most of the southern provinces. Silver and gold are widely distributed, although the production of the latter, almost entirely by washing river gravels, is small. On the Han River the flood gravels of each summer are carefully washed for their small content of placer gold brought down from the mountains. The little explored mountains of western Sze-chuan and Yun-nan are thought to contain many and rich mineral deposits.

Non-Metals.—Kaolin deposits have furnished the basis of an important and characteristic Chinese industry. Northeastern Kiang-si contains the largest and best-known deposits, and furnishes material for the pottery industry that has grown up there, supplying the rice bowls that are used everywhere in China. King-to-chen, the center of the industry, at present has one hundred and

sixty furnaces, and employs 160,000 people. Before the Taiping rebellion (1850) a million people were employed.¹⁷

Petroleum and natural gas are found in Sze-chuan. For 2,000 years natural gas has been used to evaporate salt in this province.¹⁸ Salt is a very important product in many parts of China. Along the coast it is evaporated from sea water; in Shan-si, from a salt lake, while in Sze-chuan and Yun-nan it is secured from brine wells.

China is now, and for forty centuries has been, an agricultural nation. Much of her mountainous surface, naturally ill-adapted to cultivation, has been transformed by a stupendous amount of human labor into food-producing, fertile fields. To the minerals hoarded in these mountains she has paid little attention, never dreaming of the vast potential wealth locked far beneath her soils, awaiting but the magic touch of modern industry to release it. To her present agricultural industries these resources of coal and metals, once developed, will supply new raw materials and mechanical power, which ultimately will make possible, in the hands of her enormous population, the development of a manufacturing industry of almost inconceivable magnitude, and will lay the foundation of a world-wide commerce.

¹⁷ Richards, "Comprehensive Geography of the Chinese Empire," p. 144.

¹⁸ King, F. H., "Farmers of Forty Centuries," p. 138.

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AMERICAN COMMERCIAL INTERESTS IN MANCHURIA

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The three Eastern Provinces of the Chinese Empire, collectively known as Manchuria, have a combined area of about 363,610 square miles, and a population variously estimated at from fifteen to twenty-five millions.¹ They are remarkably rich, both in agricultural products and in minerals. The soil, with the aid of an abundant and fairly uniform rainfall, produces heavy crops of beans and grain year after year, without showing signs of depletion; while underground there are immense deposits, as yet unexploited, of gold, silver, copper, lead, and coal. The population consists largely of immigrants, who are coming to Manchuria in great numbers from the less fertile provinces of the empire.² These are more progressive and less opposed to foreigners than the people of many other parts of China; and because of this fact, and also because of the greater per capita wealth due to the richness of the land, Manchuria offers an unusually favorable market for foreign products. In the year 1910, although the provinces were just beginning to recover from the destructive war recently fought within their limits, the total volume of their trade amounted to \$110,000,000.

This great commercial activity is partly due to the fact that there is no other part of the Chinese Empire so accessible to foreign enterprise. Most of the important cities have been opened to foreign trade, and an extensive railway system, combined with four large navigable rivers,³ has afforded transportation such as is unknown in the other provinces. Until 1898, Newchwang, opened to trade in 1864, was the only port of entry for foreign

¹ The names of the provinces, together with the estimated population of each, as given in the *Statesman's Year Book for 1911*, are: Shenking, 10,312,241; Kirin, 6,000,000; and Heilung-Chiang, 1,500,000.

² A recent report from the United States Consul at Harbin states that a government committee, in a two weeks' session at Harbin, sold 40,000 small farms in Heilung-Chiang Province to immigrants, at a total cost to the purchaser of \$2.22 per acre.

³ The Amur, the Sungari, the Yalu, and the Liao.

commerce in Manchuria, although a certain amount of foreign goods came into the country over the Trans-Siberian Railroad in the North. From Newchwang, merchandise was sent into the interior by means of junks on the Liao River, or overland by cart. In 1898, Russia opened the port of Dalny, within her leased territory of Liaotung, but in spite of constant efforts to divert trade to the new port, Newchwang still retained its commercial leadership. In 1901, the Chinese Eastern Railway, built by Russia, was opened to traffic, connecting these two ports in the South with the Trans-Siberian system and with the cities of the interior. The Treaty of Portsmouth gave the southern section of this line, now called the Southern Manchurian Railway, to the Japanese, who rebuilt it and replaced the old Russian wide gauge by standard gauge, thus making it necessary to transship freight at Changchun, the point of division. Since the war, also, a great number of new ports have been opened, and Japan has built a railroad connecting Mukden, on the Southern Manchurian line, with Antung and the Korean Railway. China herself is building a railroad from Changchun to Kirin, which will draw traffic from a large section at present inaccessible.⁴

In spite of these improvements in commercial facilities, trade in this section of China is by no means free from certain disadvantages which have hampered business elsewhere in the empire. The most serious of these is the appalling chaos of the currency system. This cannot be described here, but the state of affairs can be imagined from the statement that there are generally at least a dozen forms of money circulating at each port, and that these vary considerably from month to month in their rate of exchange, not only in regard to gold, but also in regard to each other. Such a condition adds a gambling element to the most conservative business. Recently, on account of pressure from the United States and other powers, steps have been taken towards the adoption of a uniform currency throughout the empire, and a substantial improvement is looked for in the next few years. Another hindrance to trade is the tariff system. Likin, or transportation, dues are levied on merchandise at every point where it is possible to establish a barrier, and the resulting expense and annoy-

⁴ According to the Daily Consular Reports for Nov. 18, 1911, the Antung-Mukden line was to have been open to traffic about Nov. 3, 1911, and the Changchun-Kirin line by the end of 1912.

ance burden commerce considerably. The payment of a 2½ per cent ad valorem surtax at the maritime customs house is supposed legally to free foreign goods from these dues, but the transit passes secured in this way are often not respected in the interior.⁵

Nevertheless, on account of the improvement of trade routes and the opening up of the country, there has in recent years been a great development both of the export and of the import trade of Manchuria. The principal exports are beans, bean-cake and bean-oil, produced mostly in the two southern provinces. Since the Chino-Japanese war of 1894-5, Japan has bought practically all of Manchuria's bean crop, and her control of the export trade has been an important factor in the competition for the import trade. Recently, small shipments of beans and bean-oil have been made to Europe, and European firms in the Orient hope to increase these to offset Japan's advantage.⁶ In the northern section much grain is produced, which is for the most part consumed locally. The neighboring Russian-Siberian provinces, however, are dependent on this section for flour, grain and wheat, and as they develop by colonization, Northern Manchuria is certain to become more and more prosperous. Other leading items in the export trade are lumber, wild silk, and minerals. The lumber is cut under Japanese direction from the forests on the Yalu River. The wild silk industry is chiefly in southeastern Shengking. The vast mineral resources of the country are as yet comparatively undeveloped, although there is an average annual output of about \$10,000,000 in value from the gold, silver, copper, lead and iron mines,⁷ which are operated chiefly by the natives, and a large amount of coal is taken from the Japanese mines at Fushun, for use on the railroad and on steamers.

The import trade covers a wide range of articles, but there are certain great staples which have always formed the bulk of foreign shipments to this region. The most important of these are manufactures of cotton, which exceed in value all other foreign imports put together. Other items are kerosene, which is more

⁵ See Monthly Consular Reports, No. 300, p. 93.

⁶ In 1910, the total exports of bean products through Vladivostok, Dalren (Dalny), and Newchwang were: Beans, 920,266 tons (average price \$14.50 per ton); bean-cake, 516,160 tons; bean-oil, 40,124 tons. In 1909, of \$13,926,522 total foreign exports at Dalny, bean products accounted for \$12,884,043. Exports to Japan were \$8,302,533.

⁷ Monthly Consular Reports, No. 319, p. 69.

and more widely used, lumber and tobacco.⁸ Flour, brought from the United States, once stood high in the list, but the great output of the mills in Northern Manchuria, which can grind the native wheat and sell it at a price which no foreign flour can touch, has driven out the American product. At present, there is a promising but as yet undeveloped market for machinery of all kinds, especially for modern agricultural implements, which could be used to good advantage on the rather large farms of the region. These goods must be sold by native dealers in native stores, and the primary consideration which determines the popularity of an article is its cheapness. The better grades of Western manufactures find a market only among the small European element, while inferior goods, produced by cheap Oriental labor, and sold at a low price, are readily accepted. The Chinese are, however, good judges of quality, and are ready to pay better prices for superior goods if they can afford to, so that as the country develops there will undoubtedly be an increasing demand for first-class products.

Before the Russo-Japanese war, Manchuria imported more goods from the United States than from any other foreign country, and American imports at Newchwang between 1900 and 1904 amounted to about five million dollars annually.⁹ By far the most important commodities in this trade were cotton piece goods. In 1901, out of a total of \$24,813,692 native and foreign imports at Newchwang, \$14,660,000 represented cotton products, and of this about one-third was native Chinese textiles, one-third American piece goods, and the rest chiefly imports of yarn from India, Great Britain, Japan, and China. In 1902, about thirty-five per cent of the total foreign imports at Newchwang came from the United States, and the greater part of this was cotton goods. In 1903, the total foreign imports were \$13,314,012, and America's share was \$5,562,255, of which \$4,873,960 was cotton goods. These figures will suffice to show the position held by the United States in former years in regard to the most important import of Man-

⁸Imports of tobacco, especially in the form of cigarettes, have increased immensely within the last few years, probably because of the curtailment of the supply of opium.

⁹The figures given here are taken from the reports of United States Consuls, who secured them from the reports of the Native and Imperial Maritime Customs. As there has been almost no period since 1900 when there have been customs houses at all the ports of entry in Manchuria, such statistics must be considered rather as comparative than as exact.

churia.¹⁰ The balance of the goods from America consisted chiefly of flour and kerosene, for each of which Manchuria offered a very important and continually expanding market.

Between 1901 and 1904, American commerce suffered considerably from the policy of Russia. This power had always exercised great influence in Manchuria, and she had, under various pretexts, finally established a measure of military control over the provinces. When she leased the Liaotung Peninsula in 1898, and opened Dalny as a free port, she blocked the establishment of a Chinese customs house there until July, 1903. In 1901, as a result of the Boxer uprising, she occupied Newchwang. The same year, the Chinese Eastern Railway was opened to traffic, under her control. By discrimination in rates, and by preventing the collection of customs duties at Dalny, she attempted to divert to that port, where her own merchants were established, the trade formerly enjoyed by Newchwang, which was the base of the commerce carried on in Manchuria by other foreign countries. She also took measures to increase her own imports to the provinces. Fourteen steamers, subsidized to the amount of \$309,000 annually,¹¹ were put in operation between European Russia and Vladivostok, Port Arthur and Dalny; and the Russo-Chinese Bank advanced large sums to Chinese merchants for the purchase of Russian goods. The same bank established a commercial branch to sell Russian oil and sugar. While other foreigners were still excluded from the interior, Russian subjects were to be found everywhere, building flour mills, meat packing establishments, and factories, opening mines, and selling Russian goods. Harbin, founded by the railroad company in 1896, had a European population of 60,000 in 1904, and other Russian settlements increased rapidly in size.

This policy, however, was not entirely successful. Russian trade was stimulated, but it by no means drove out that of other nations. American cotton goods were imported in as great quantities as before, although the Russian government was exerting every effort to supplant them by the product of Russian mills, and the volume of American trade thus remained nearly the same. Nevertheless, because of the competition of Russian oil imported

¹⁰ In addition to the trade at Newchwang, there was also a certain amount at Dalny, but no statistics are available for this because the customs house was not established there until July, 1903.

¹¹ U. S. Consular Reports, Vol. 73, p. 40.

duty free at Dalny and carried at low rates on the railroad, the importation of American kerosene at Newchwang fell from 3,172,000 gallons in 1901, to 603,180 gallons in 1902; and American flour was almost driven from the market by the product of the Russian mills near Harbin. But these articles made up only a small part of the total trade. Russia's control of the railroad was not so great an advantage as it seemed, since the cost of transporting bulky freight on it was prohibitive, and thus it was not nearly so effective a means of distribution in the interior as were the junks on the Liao River at Newchwang. It had already become evident that Russia could not hope to monopolize the commerce of Manchuria without a more serious disregard of the "open door" than she had yet shown, when the war with Japan drove her out of the southern province and confined her influence to the sparsely settled North.

After the restoration of peace, American trade in Manchuria seemed to have a clear field. The subsidized Russian lines to Port Arthur and Dalny had disappeared, and the disorganized condition of the country had caused the flour mills in the North to close, so that American flour was in greater demand than ever before. American kerosene was in full control of the market, and American cotton goods seemed to have no important competitor, for over \$9,000,000 worth were imported into Manchuria in the year 1905. The year after the war was one of unprecedented commercial activity. There followed, however, a period of depression. Foreign imports at Newchwang decreased by one-half in 1906, and decreased further in 1907. This was due partly to the fact that Dalny was again without a customs house, but chiefly to the disastrous effects of the war on the interior. In 1908, a healthy revival set in, and the total imports increased steadily throughout Manchuria, especially with the opening of Antung, Mukden, and the important cities of the North. American trade, however, improved but little and soon began to fall off. In 1908 and 1909, American consuls reported serious decreases in the amount of goods coming from the United States. In 1910, our imports had fallen to a comparatively insignificant figure, and our trade in cotton goods, that is, the great bulk of all our trade, had largely passed into foreign hands. Our position of leadership in the Manchurian market was lost.

The nation which almost alone profited by this immense decline

in American trade was Japan. In order to explain the great commercial advance of this power in Manchuria, it is necessary to sketch briefly the history of her systematic attempts to secure markets there for her products.

In the first place, Japan's geographical location gives her a decided advantage over Western nations competing with her for Manchurian trade. She is far nearer to China than any of her rivals, and is thus able to maintain regular, efficient, and cheap transportation with all of the ports in Shenking Province and with Vladivostok, where many goods are imported for use in the North. Her ownership of Korea makes it possible for her to send quick freight from Tokio to Harbin almost all the way by rail, over the Korean railroad and the Antung-Mukden line. She has a further advantage in her practical monopoly of the foreign export trade of the provinces, since a firm in China which does not do exporting as well as importing is exposed to serious financial difficulties from the variations in the rate of exchange.

Japan has not only made the most of her natural advantages in order to secure for herself the trade of Manchuria, but she has also taken extraordinary measures to assist her exporters. She had always enjoyed the greater part of the shipping and a fair share of the commerce of the provinces, but even before her war with Russia ended, it became evident that she intended to take advantage of her military occupation of the country to establish her trade still more firmly.¹² Great quantities of goods were sent into the interior, and after the conclusion of peace, the transports which carried the army home made their return trips profitable by bringing thousands of immigrants, who established themselves everywhere as farmers and merchants. While these merchants were doing an excellent business, foreign traders were rigorously excluded from the interior on the ground that military secrets were involved.¹³ It was asserted that the Japanese, supported by their troops, refused to pay the *likin* dues to which the goods of other nationalities were subjected, and further that they seized all of the desirable land in the cities which, according to treaty pro-

¹² See the report of Special Agent Crist, in *Monthly Consular Reports*, No. 301.

¹³ The United States Foreign Relations for 1908 record numerous complaints from American merchants who were not allowed to go into the interior to look after their property and interests.

visions, were soon to be opened to foreign trade.¹⁴ All concessions obtained or claimed by the Russians were taken over by the Japanese as a matter of course. In the summer of 1906, a great industrial and commercial exposition was held at Mukden to promote interest in Japanese products, and similar expositions were subsequently organized in other cities. Great quantities of Japanese goods were brought in duty-free at Dalny and over the Korean boundary, while other foreign goods were going through the customs house at Newchwang.¹⁵ These conditions were ameliorated with the gradual opening of the interior in 1906 and 1907, and comparative equality of opportunity was again restored when customs houses at Dalny, Antung and Tatungkou, ports which had formerly been under Japanese control, were established on July 1, 1907.

Equality of opportunity, however, could not be said to exist. Japan still retained control of the railroad, and, to a certain extent, of the financial system. By means of the railroad, she attempted to divert the trade of Newchwang to Dalny, or Dairen, as it is now officially called, by discriminatory rates, much as Russia had done. This policy has undoubtedly increased the commercial importance of the latter, although the former is still the chief port of entry. Japan also retained a certain amount of control over the currency of the provinces, which gave her banks an opportunity practically to regulate the rate of exchange. During the war with Russia, Manchuria had been flooded with Japanese "war notes," which were called in after the conclusion of peace and exchanged for notes issued by the Yokohama Specie Bank. These made up a large part of the currency, especially in Shenking, and were naturally a great aid in establishing a strong Japanese banking system.

When Manchuria was finally re-opened to foreign trade, Japanese products had secured a firm footing in the interior. Foreign merchants believed that this would be lost with the removal of the extraordinary advantages conferred by military occupation, but it soon became evident that even with the "open door" Japan was now a very dangerous competitor. The imperial government

¹⁴ In 1906, the Chinese government had great difficulty in finding a site for the customs house at Antung, because the Japanese had taken possession of all of the land on the river front. See *Foreign Relations for 1906*, p. 221.

¹⁵ In 1907, it was estimated that Japanese imports to Manchuria in 1906 amounted to over \$12,000,000, of which less than \$1,500,000 paid duty at Newchwang.

and the great business interests of the country united in a systematic attempt to get control of the import as well as the export trade of Japan's new "sphere of influence," as a part of their general scheme for national economic and industrial development. The liberal and progressive element, which was in complete political control after leading the nation to victory over Russia, extended the time-honored system of economic paternalism and did every thing in its power to promote the national industrial prosperity. The railways were already owned by the government, and the steamship lines were controlled through large subsidies. Manufactures were encouraged, and where an industry was injured by competition a trust was formed and placed under government supervision. For the surplus manufacturing products, and especially for those of the cotton mills, Manchuria offered an excellent outlet, if the United States could only be ousted from its commercial leadership there. The government and the manufacturers accordingly turned their attention to this task.

On May 30, 1906, the *Jiji Shimpō* announced that several large Japanese spinning and weaving companies had united in the Manchurian Export Gild, to advance their common interests and to export their goods under a common trade-mark. The Mitsui Bussan Kaisha, the leading commercial house of Japan, was to act as the general agent of this gild in Manchuria, and the Yokohama Specie Bank and other institutions were to loan money at 4½ per cent to merchants doing business there to enable them to purchase Japanese goods. The government guaranteed these loans, and also secured favorable rates on the railroads and on the subsidized steamship lines. In Manchuria itself, permanent representatives were appointed at all important towns, and travelling salesmen, well equipped with samples of goods and speaking Chinese fluently, were sent throughout the country. The consuls in the Eastern Provinces offered every possible assistance, and the manufacturers at home carefully followed their suggestions. In addition, commercial students, paid by the government, and under the direction of the nearest consul, studied the trade conditions in each locality, and their reports enabled the export houses to work more intelligently than was possible for those of other nations. In Japan itself, the mills steadily endeavored to improve the quality of their output, which was at first of a very inferior grade, and finally

succeeded in making it nearly as good as, while far cheaper than, similar Western products.

This policy has met with remarkable success. In spite of the ingrained respect of Chinese merchants for long established trade-marks, and in spite of the intense unpopularity of Japanese goods caused by the dispute over the seizure of the steamer *Tatsu Maru* in 1908, and by the resentment among the Chinese at the Japanese policy in Manchuria itself, the imports of cotton goods from the Island Empire have now taken the leading place in the Manchurian market.¹⁶

The methods used to attain this position have been severely criticised. The counterfeiting of trade-marks, in particular, has caused much bitterness on the part of Western merchants, and strenuous efforts have been made to secure adequate protection against this practice. In 1904, in accordance with her treaty obligations, China adopted a series of regulations for this purpose, which have proved entirely inadequate. In the following years, the United States made agreements with numerous powers for mutual protection by means of the consular courts in China, but Japan did not enter into such a compact. Trade-marks are of even more importance in China than in occidental countries, because the Chinese consumer always endeavors to secure the brand he has been accustomed to use, recognizing it by the trade-mark.

The decline of American trade in Manchuria is due primarily to Japanese competition, but the development of the native Chinese industries is a factor that should not be overlooked. The trade in native goods profited greatly from the steady decline in the value of silver which set in after the war, since this made the silver prices of foreign articles, which were manufactured by laborers paid in gold, much higher than those of goods made by laborers who still received their customary wages in silver. Chinese cotton goods, manufactured chiefly at Shanghai, have been gaining in popularity in Manchuria for at least ten years, since they are low-priced and are said to be of durable quality. The once large importations of American flour had already ceased before the war. After the war the mills in the North were unable to distribute their products in

¹⁶ In 1904, according to the *Jiji Shimpo* (quoted in U. S. Foreign Relations for 1906), the imports of sheetings and drills from Japan at Newchwang and Dalny were valued at only \$18,206, as compared with \$5,347,900 worth from the United States. The change effected by Japan's policy is striking.

the South because of the destruction of part of the railroad, and great quantities of American flour were brought in. This importation practically ceased with the withdrawal of the army and the rebuilding of the railroad, and American flour is not now seen in Manchuria.

The competition of Japanese and native commerce was indeed formidable, but it could never have overcome the established reputation and popularity of American goods in so short a period if the exporters of the United States had made any intelligent effort to retain their hold on the Manchurian market. The one real fundamental cause of the decline in our trade has been the way in which it has been handled. In the first place, there has never been any regular direct steamer communication between our ports and those of Manchuria, although the volume of our trade, and the great saving in the cost of transshipment would make such a service very valuable. Our goods have generally gone to Shanghai, and have been imported into Manchuria from there largely by Chinese merchants or by firms of other nationalities, that is, the sale of our products has been in the hands of our commercial rivals.¹⁷ In the second place, American exporters seem to have paid no attention to the suggestions of consuls at Manchurian ports as to the peculiar requirements of the Manchurian market. Instead of sending samples of goods, which are an absolute necessity there, as a Chinaman will not buy wares which he has not seen, they have sent catalogues in English, which are entirely unintelligible to most of the merchants whom it is necessary to reach. Complaints are constantly heard of carelessness in packing and in sending shipments. Little effort, moreover, has been made to develop the great opportunities which Manchuria offers for the extension of trade into new lines, although the Consular Reports for the last decade have been full of suggestions regarding such possibilities. In short, the former American leadership in this trade has gone practically by default, because of the incompetence and carelessness of American exporters.

The present commercial position of the United States in Man-

¹⁷ In 1905, when our trade in Manchuria reached its highest point, there were three American business houses there, out of a total of 143 foreign establishments. (Monthly Consular Reports, No. 306, p. 90.) In 1907, American trade was largely handled by the firm which was also agent for the Japanese Manchurian Export Guild, and by a German firm. (Monthly Consular Reports, No. 318, p. 102.)

churia may be summarized as follows. Imports are practically confined to cotton goods, kerosene and tobacco, of which cotton goods are still the most important, although they have seriously decreased within the last three years.¹⁸ Our trade in kerosene and in tobacco, especially cigarettes, is still prosperous because these have been sold by aggressive and intelligent companies which have followed the same methods as are employed by Japanese firms in extending their trade. The Standard Oil Company is far ahead of its competitors from Sumatra, Russia and Borneo, and in 1910 over ten million gallons of American kerosene were imported out of a total of not quite fifteen million. The British-American Tobacco Company, which is practically an American concern, has been able to compete with no little success against the products of the Japanese government monopoly, largely because its factories are located at Shanghai, so that it has the advantages of direct transportation and of cheap Oriental labor. Each of the firms has an effective selling organization in the interior. With the exception of these two lines, however, our trade is at present either gone or rapidly disappearing.

How much chance will there be in the future for American trade to regain its former position in Manchuria? The answer to this question will depend largely on the respect shown by Japan for the "open door," the principle of equal opportunity for the commerce and industry of all nations. At the present time, it seems probable that the Mikado's government will continue to respect this principle, both from necessity and from regard for its own interests. In the first place, it is not likely that Japan will be able to acquire more extensive political control over the Eastern Provinces than she already enjoys. Japanese immigration to Manchuria has not been large, because, as a close student of Chinese conditions has pointed out, her immigrants have never been able to compete with the native stock either as merchants or as farmers.¹⁹ The country

¹⁸ In 1905, the United States practically monopolized the trade in piece goods. The number of pieces of drilla, jeans, and sheetings imported into Manchuria during the last two years was, however, as follows:

| | Drills | | Jeans | | Sheetings | |
|----------------|---------|---------|---------|---------|-----------|---------|
| | 1909 | 1910 | 1909 | 1910 | 1909 | 1910 |
| American | 310,428 | 186,698 | 98,111 | 3,968 | 706,735 | 378,121 |
| Japanese | 114,814 | 252,342 | | | 261,743 | 694,574 |
| British | 12,359 | 6,750 | 278,258 | 323,246 | 69,953 | 15,231 |

These figures, given in the Daily Consular Reports for Nov. 18, 1911, clearly show the gains made by Japan in the import of these wares.

¹⁹ J. W. Jenks in the *Outlook*, March 11, 1911.

will remain distinctly Chinese, and any outside control must take the form of domination rather than of absorption. Moreover, any attempt seriously to interfere with foreign trade would bring on the active hostility of all the other powers which are important in Eastern affairs, and especially that of the United States and Great Britain, whose friendship Japan could not afford to lose. These powers, even if they did not consider their own commerce, would not tolerate any interference with the tariff or with the trade on which the amount of the duties levied depends, because of their interest in the Chinese debt, which is secured by the customs revenues. China herself, also, would be an insuperable obstacle to Japanese political control in Manchuria. The concessions now held by Japan for the most part revert to China at the end of varying periods, and in view of the remarkable national development of the Celestial Empire during the last few years, it seems probable that she will be able to insist on and secure her rights when these periods expire.

Moreover, even if Japan were able to shut out the commerce of other nations from Manchuria, it would not be to her interest to do so. Her geographical advantages alone enable her to control a large share of the trade in commodities which she produces, and the increased prosperity which the general commercial development of the country will carry with it must, in the long run, be favorable to Japanese exporters. The few American merchants who have shown sufficient interest in Manchuria to send their goods to the commercial expositions, held by the Japanese at all of the important distributing points, report that they were treated with courtesy and that their goods were well exhibited at very reasonable charges. It must also be considered that Japanese capital can never suffice for the development of the great concessions of which Japan took possession after the war. For the sake of these, foreign capital must be attracted to the country, and this can only be done by the frank acceptance of the "open door" policy.

The actions of Japan which have recently given rise to the numerous accusations that she intended to do away with the open door in Manchuria, may generally be ascribed, not so much to a desire to injure foreign commercial interests as to a determination to maintain the value of her own concessions. For instance, the opposition to China's attempts to build the Hsinmintun-Fakumen

railroad into the interior has arisen from a fear that this line would compete with the Japanese-owned Southern Manchurian line and would also draw trade away from the Japanese port of Dairen, or Dalny. The indirect attempts to injure the commerce of Newchwang are due to a desire to make Dairen more prosperous. Whatever the secondary effects of Japan's policy may be, she seems to have no intention, at present, of trying to stifle foreign enterprise, and where foreign trade is being driven out, it is not by a system of exclusion but by strenuous competition.

It should be remembered, moreover, that Japan's sphere of influence covers only about one-third of Manchuria. The two-thirds still under the influence of Russia is, it is true, less thickly populated and less important commercially, but a large immigration is constantly increasing its value as a market, and it is said to be fully as fertile as the southern region. Without some radical violation of the open door principle, however, which will be as difficult for her as for Japan, Russia's commercial rivalry will not be formidable here. The cost of bringing bulky goods from Europe on the railroad is prohibitive, and goods brought by sea must come through Vladivostok, which is closed by ice part of the year, or through the southern ports and from there into the interior on the Japanese railway. In either case, the sea route from European Russia is longer and more expensive than that from the United States. Japanese trade has already secured a foothold north of Changchun, and no doubt properly handled American trade could do the same.

It seems probable, then, that in the future Manchuria will be open to the commerce of all nations on equal terms. There is no reason why American exporters, by adopting a new policy, should not be able to increase greatly the sale of our products there, if they will only make an effort to do so. American banks should be established in the principal Manchurian trade centers and Manchurian products should be brought direct to the United States. A considerable amount of Manchurian bean-oil is now used here, but it is imported from Europe, after being expressed there.²⁰ In addition, an efficient method should be adopted for selling goods after

²⁰ Under the Payne-Aldrich tariff the duty on beans is 45 cents per bushel of 60 pounds, which is nearly 100 per cent in the case of Manchurian beans. This naturally would prevent their importation into this country. The duty on expressed oils is only 25 per cent.

they have reached the Eastern Provinces. In dealing with Chinese merchants, personal relations by means of local agents are necessary, and samples of wares should be used rather than catalogues written in English. If a really effective policy were adopted, soon we should again be sending large quantities of goods to Manchuria. Even though our cotton products were unable to compete with the government-aided output of Japanese mills, we could still sell machinery of all kinds, and stoves, shoes, condensed milk, and countless other manufactures for which a demand exists or will soon exist in the Manchurian market. We could thus always have a fair share in this trade, whereas at present the amount of American goods imported grows smaller each year. It would be a great misfortune for American industry if we should lose entirely our part in this already great and rapidly growing trade; and if this is to be avoided, an active policy of developing our Manchurian commerce must be inaugurated at once.

NOTES ON THE MAMMALS OF ECONOMIC VALUE IN CHINA

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In China, where there is so much poverty, and where so little goes to waste, almost every animal has some economic use. In the following notes, gathered during three years of travel, I have tried to touch only on the mammals which are of most economic value to the Chinese themselves. My aim is to give some notion of economic conditions in China to-day, not to furnish information for anybody desirous of exploiting the furs or hides of the country.

Domestic Mammals

Most of the domestic mammals of China are so well known to Western people that it is scarcely necessary to mention them. I will treat them briefly.

Cattle of a small hump shouldered variety are commonly used in northern China as beasts of burden. On the great highway which connects Peking with Urga and Uluassutai in Mongolia, one sees caravans of hundreds of carts, each drawn by an ox. They bring salt and borax to Peking from remote parts of Mongolia. In other regions they are used as pack animals or for general work on the farm. Cows are never milked by the Chinese, cheese and butter are unknown. The skins of cattle are smoke-tanned and used for making boots, saddlery, etc.

Yak.—Farther westward, where the provinces of Kansu and Sze-chwan border on Tibet, the place of the ordinary cattle is taken by a cross between the wild yak and the cow. These hybrids are much larger than their domestic parent, long horned, and black in color, with a white median stripe down the back. Like the wild yak, they have long hair hanging from the breast, legs, and tail. In western Kansu they are used as cart animals; in western Sze-chwan they are the pack animals which carry nearly all the freight of tea into Tibet. The tribes-people on the Tibetan frontier, who are more Tibetan than Chinese in their customs, milk these animals,

and make butter and cheese, and an intoxicating liquor like kumiss. A few of the Chinese who come in contact with these pastoral "western barbarians" use these products. The hides of the yak are valuable for the leather they produce, and the flesh, which is excellent, is much used for food.

Water Buffalo.—Throughout the lowlands of the Yang-tze basin, and even back into Sze-chwan to an altitude of 3,000 or 4,000 feet, one often sees the slow-going water buffalo. It is used chiefly for cultivating paddy fields, but is too slow for a pack or draught animal on the road. Its hide is of considerable value. I do not think the water buffalo is ever killed for food, it is too expensive an animal, but when it dies of old age or disease, its flesh is eaten. Of course under these conditions it is wretched food.

Camel.—In Chi-li and Shansi, and to a less extent in the provinces of Shensi and Kansu, the Bactrian camel is much used as a pack animal, or sometimes for drawing large carts. Its hair is valued and is exported to Europe. The Chinese use it for making ropes and coarse sacking. It seems probable that it is the high cost of the camel which restricts it to the wealthier vicinities.

Sheep.—Black-headed, fat-tailed sheep are commonly raised in the poorer mountain regions of northern and western China. Their flesh is a staple food, and may be purchased in any city or market town of these regions. Woolen garments are not much used by the Chinese in general, but in some districts wool is spun and knitted into stockings, mittens, and winter garments for little children. In northern China, where the winters are severe, felt made of sheep's wool is much used in the shape of sleeping rugs, waist-coats, capes, caps, and stockings. Sheepskins with the wool on are made into coats and gowns of all grades, from those used by the poor muleteer, costing only a few cents, to those worn by well-to-do officials, costing upwards of ten dollars.

Goat.—Like sheep, goats are raised in the poorer regions of northern and western China. There are a number of varieties, but all of less value than the sheep. Goats are able to pick up a living where even sheep have a hard time, and so are often owned by the very poorest country people who live high on the mountainsides where the soil is scarcely productive enough for tilling. The flesh and wool of goats are put to the same uses as those of sheep, but the quality is poorer.

Swine.—As a producer of food the domestic hog is undoubtedly the mammal of greatest value. This animal has its place in nearly every household, whether rich or poor, in the dense city or the country. Even the smallest market has its stall where pork is sold. If a private family kills a hog they take what flesh they do not wish to keep to market. The Chinese understand smoking, salting, and drying of flesh, after their own fashion, and hams and bacon are to be purchased. Every part of the hog is put to some use. Europeans in China do not eat pork owing to the filthy conditions under which the animals are kept, but there is no flesh the Chinese like so well. They call it "*da-roc*," the great meat.

Pigskin is occasionally made into leather, but is more often used as rawhide for straps and thongs. Brushes are made from the bristles.

Horse.—There are various breeds of horses in China, but they are mostly of small size. They have, however, excellent powers of endurance. Horses are seen most in the northern provinces, where they are chiefly used for riding, but also as pack and draught animals. Their hides are made into leather, and their flesh is sometimes eaten by the poor.

Mule.—Mules are bred in Mongolia, in the region northwest of Peking, and also in the far west of China on the borders of Tibet. They are larger than the usual Chinese horse, faster travelers with a load, and of more endurance. Though much commoner than horses, they bring a higher price. She-mules are much used as cart animals in and about Peking, but on the pack trails in the mountains one sees only stud-mules.

In order to give some idea of the cost of travel with mules, I will relate a personal experience. In the city of Si-ngan-fu, the capital of Shensi, I hired mules at the rate of forty-three cents per animal per working day, and about twenty-five cents per day when we did not travel. This included the hire of the three muleteers, who cared for five animals and acted as our servants besides. The mules were supposed to carry 200 catties (about 260 pounds) each, and cover from eighteen to twenty-seven miles a day, according to the character of the country. In truth, my loads were not so heavy as this, but we often did over twenty miles a day, even in rough country, and, in the plains, sometimes over thirty miles.

Donkey.—Donkeys are exceedingly common in the northern

provinces of China, where they are used as pack animals, and to do general farm work. Their initial cost is small compared with the price of a mule, and they are much cheaper to keep, so they are more popular with the poor people.

Dog.—Every country family has a dog, and often several. In some places they seem to be as numerous as the people. There are of course numbers of breeds, but the common Chinese dog is an animal much resembling a wolf, only smaller, and not always colored like a wolf. They are chiefly for watching purposes, and seldom fail to bark when one passes. Though their tempers are bad, they are too ill-fed to have much courage, so seldom attack one. Dog-skins with long hair are much in demand among the poor as sleeping rugs. The notion that dogs are a common food is false. Except in a time of actual famine dogs are rarely or never eaten, even by the poorest. I speak for the provinces of north, central, and western China.

Cat.—There are several varieties of domestic cats kept by the Chinese. Most attractive looking is the long-haired gray cat of Peking. In central Sze-chwan all cats are highly valued as ratters, but it is hard to see how they kill any rats, for their owners keep them tied up for fear of their being stolen. Catskins are of some value as fur in all parts of China, and when dyed and disguised are sold as the fur of other animals.

Rabbit (*Lepus cuniculus*).—The domestic rabbit is seldom seen except in central Sze-chwan, where it is commonly raised. The flesh is eaten fresh, or the animals are skinned and dried whole for food. Coats, gowns, and leggings are made of the fur.

Wild Mammals

Deer (*Cervus sp.*).—A large deer more resembling the American elk (*Cervus canadensis*) than anything else inhabits the wilder mountains of far-western China. It is much hunted by the tribespeople for the sake of the antlers, which bring a good price with the Chinese, who use them for making eye medicine. The flesh and skin of the animal also have their value, and the tendons of the legs are particularly prized. These, when boiled into a gelatinous mass, are served by the Chinese at their feasts.

Roe Deer (*Capreolus bedfordi*).—This is a very much smaller deer than the elk, and being also very common in some regions of

the northwest is of comparatively little value. The antlers, which are small, are used for making medicine, and the flesh is relished. Deerskins are seldom tanned, but are often stretched and dried, and used thus as sleeping rugs.

Musk Deer (*Moschus moschiferus* and *M. sifanicus*).—These species, though rare, are still met with in the remoter mountains of central and western China. The flesh and skins are of little importance, but the musk, produced only by the male, in a gland near the navel, is of high value to the Chinese as a medicine and perfume. The long sharp incisor teeth, which grow as tusks from the mouth of the male musk deer, are much used as toothpicks by the merchants and literati of China.

Takin (*Budorcas sp.*).—This peculiar animal, of a size approaching that of an ox, and characters between those of an ox and those of a goat, inhabits portions of Tai-pei-san, a lofty mountain in central China. I cannot claim that it plays an important part in the economy of China, but it is regarded as of great value by those who know of its existence. Skin, flesh, bones, blood, every part in fact is supposed, by the superstitious and ignorant Chinese, to have some special virtue. It is not very often that one of them is killed, for living as they do in precipices at high altitudes (9,000 to 11,000 feet); and going in herds, hunting them requires not only energy, but great skill, and, in the case of the poorly armed Chinaman, much risk.

Goat-antelope (*Nemorhædus argyrochætes*, and other species).—The species of *Nemorhædus* found in western China are perhaps not of much economic importance, yet one often sees their bones and horns in the medicine shops, and the skins of the smaller species on the backs of the tribes-people.

Wild Swine (*Sus sp.*).—In the hills and mountains of northern, central and western China wild hogs are numerous, and are much more of a hindrance than an economic help. The peasants are much in dread of their raids on cultivated fields, and during the seasons when crops are most in danger the fields are watched night and day. For this purpose little shacks of poles, covered with thatch of straw or cornstalks, are put up in commanding positions, and members of the peasant's family take turns in watching there. The flesh of the wild hog is relished by the Chinese. They make little use of the skins, but in some localities they are used for containers for the liquor distilled from maize, or millet.

Mink (Lutreola siberica).—This common, medium sized mink is valued somewhat for the fur it produces, which is not good, but it is valued more especially for the hairs of the tip of the tail, of which the Chinese make their writing brushes. The animal lives very frequently about human habitations. It destroys rats, but is also a serious enemy to poultry.

Indian Marten (Martes flavigula borealis).—This rather rare marten is one of the most beautiful animals in the fauna of China. Its fur is valued quite highly, being used for the lining of garments. It is not often seen.

Wild Cat (Felis microti).—The wild cat of China produces a much used fur, for the animal is common in the mountains of the north. The fur is soft, even, and thick, and the skin is light. On account of the animal's abundance the fur is not an expensive one. It is used for the lining of coats and waistcoats and for the making of fur stockings. Mongols and Tibetans wear it as collars and caps.

Tiger (Felis tigris).—The Chinese claim that there are many tigers in the more remote mountains of all parts of the Central Kingdom, but it is my conviction that the tiger is very rare and that the leopard is often mistaken for the tiger. That tigers are occasionally found is evidenced by the skins one sometimes sees in the shops of larger cities. They are tanned whole and used by officials, or other wealthy persons, to cover divans in reception halls. The flesh and bones are regarded as of great medicinal value, the notion being that, as the tiger is such a powerful animal, any part of him must be strengthening food for the weak and sick. The bones are powdered and consumed in that form with food. They are given to children with rickets.

Leopard (Felis pardus).—The leopard is quite a common animal in the rugged mountains of northern and western China. Its footprints are often seen, and its cry is sometimes heard by the traveler, while the inhabitants tell many stories of its thefts of calves, sheep, hogs, and dogs.

In Chentu, Sze-chwan, a good leopard skin can be bought for \$5.00 or \$6.00. In southern Shensi I once purchased a good skin and entire skeleton from some hunters for \$3.00. Leopard skins, like those of tigers, are used for rugs on divans and saddles. The flesh and bones are supposed to have medicinal properties. In Tibet an occasional black leopard is found. These are probably melanistic

individuals of *F. pardus*. At any rate, they are regarded by the Chinese as of greater value than the ordinary form. On the Tibetan frontier one also sees examples of the highly prized and truly beautiful snow leopard (*Felis uncia*), the skins of which, like so many other furs, are made into lining for gowns.

Lynx (Felis lynx).—A good many skins of the lynx come to China from the "Inside County," i. e., Tibet. These are very beautiful, and of a very soft fur exceedingly pleasing to the touch. The Chinese treat these skins as they do all furs of value. After tanning, the skins are cut into small pieces and these are sewed together in such a way that the fur of one quality or one color, as the case may be, all comes together. For instance, one gown will be made out of the fur of the backs, another out of that of the paws and legs, and another out of the skin of the chin and throat.

At Tau-choe, a fur trading town on the border of Kansu and Tibet, I once priced a lynx skin lining for a long gown. I was asked fifty ounces of silver, but I have no doubt that it could have been purchased for thirty ounces, about \$18.00.

Wolf (Canis lupus).—The wolf ranges singly or in pairs throughout northern China, from Shantung to Kansu, and is quite common in certain localities. It resembles the American timber wolf, and is so much like certain large Chinese dogs that one does not always know which is which. Occasionally wolves seem to take advantage of this likeness and come close to dwellings and people in broad daylight. Wolf skins are used in China for covering divans, and are worth several dollars apiece.

Fox (Vulpes vulpes).—The red fox is one of the most common fur-bearing carnivorous animals in China, and the one of which the fur is most popular. There is a wide range of color in this species, from a rather unpleasing reddish-yellow to a deep reddish-brown. The deeper the red the better the Chinese like it, and the better price the skin will bring. Prices of fox skins vary greatly in different localities, but in Kansu I have seen a rather poor raw skin sold for about thirty-three cents and a good, red, winter skin for nearly one dollar. As described in the case of the lynx, the Chinese cut up the fox skins and piece them together to get an even quality of fur. The white soft fur of the throat is regarded as the choicest part, and I fancy the skin of the legs is the least desirable. Coats, waistcoats, and gowns are made of this fur.

Otter (Lutra vulgaris).—Though ranging widely through China, the land or common otter is neither common nor easy to secure. One occasionally sees a raw skin hanging in a shop, and these range in price from about \$1.20 to \$3.00 or even \$4.00, according to the quality and size. A few times I have seen caps of otter skin worn. Long gowns lined with it are seen in the shops. These are of high price.

On the upper Yang-tse-kiang and its tributaries the otter is used for fishing. The fisherman has the animal tied to his raft by a long chain, and when they reach a favorable spot for fish the otter voluntarily dives off the side. Whether he makes a catch or not, he returns very soon to the raft, and the fisherman proceeds to another spot.

Bear (Ursus sp.).—Bears are among the rarest mammals in China, but I know of a species of black bear which occurs in western Sze-chwan. In Kansu I have seen the fragmentary skins of a "blue" bear of unknown species, but reminding one of the "blue" bear of the Mt. St. Elias region. Bear skin is, if course, too heavy for garments, and is used in China only in the shape of rugs, so far as I have seen.

Badger (Meles leptorhynchus).—This "pig-nosed" badger, a fairly common animal in northern China, furnishes a coarse fur used by the peasantry for winter jackets and caps. Pieces of the raw skin are often used by Chinese hunters to protect the breaches of their matchlock guns against dampness. Badger flesh is eaten with relish by the poor.

Hares (Lepus swinhoei and subsp.; Lepus sechuenensis).—Swinhoe's hare occurs in Shantung, Chi-li, Shansi, and Shensi, often in large numbers. It is much hunted by the Chinese, and its flesh may be bought in the market of any large city. On account of the tenderness of the skin the fur is not of much value, but is sometimes used for lining caps and ear mufflers.

The Sze-chuen hare is a much rarer animal of larger size, living at high altitudes in northwestern China. When secured its fur is used in the same way as that of the other hare.

Squirrels (Sciurus vulgaris; Sciurotamias davidianus et subsp.; Sciuropterus sp.).—The common squirrel of Eurasia certainly inhabits Siberia and Manchuria, and possibly northern Chi-li. But whether the skins are all imported from the north or not, they are

very widely used throughout China for the lining of ladies' gowns. The skin is very light and the fur soft and thick, but not very long. The white or creamy fur of the underparts is considered the choicest, so the skin is opened down the back, preserving the belly intact. When sewn into a garment the creamy white bellies contrasting sharply with the gray of the sides produce a very pleasing effect.

Père David's squirrel produces a fur used in the same way. It is an animal eight or nine inches in length of head and body, and of colors produced by a mixture of gray and buff. It has not the excellent quality of fur found in *S. vulgaris* nor the beautiful contrast of upper and underparts, therefore it is less prized.

There are several forms of flying squirrels in China, all valued for the softness of their fur, but being nocturnal and arboreal in habit, they are seldom seen and difficult to secure.

Rodent Mole (*Myosphalax cansus*, *M. fontanieri*).—Another rodent of some economic value is the rodent mole of northern China. This is an animal some seven inches in length, resembling a mole in its habits, and to a certain extent in its appearance, but it lacks the sharp nose. The fur is mole-like and is used by the Chinese for lining light garments and for making ear-mufflers. The flesh is thought to have medicinal value.

On the Tibetan border of Kansu Province the tribes-people regard the flesh of the rodent mole as very delicate food. In April, when the animals are emerging from hibernation, these natives capture them with bow and arrow traps set to spear them through the surface earth as they pass through their burrows. They are then skinned and cleaned and spread out by spitting them with little sticks. Thus they are cooked and eaten.

Macaque (*Macacus tcheliensis*).—This monkey can scarcely be called a fur-bearing animal, but it furnishes a skin much used by the Chinese for waistcoat linings.

An ape, probably a species of *Semnopithecus*, inhabits the mountains of western China and his skin is very much prized by the Chinese. The hair is two or three inches long and of a sandy color. I was told that a good skin was worth forty ounces of silver, about \$25.00. This skin is used by the Imperial Family for making leggings.

The reader who has taken the pains to peruse these pages will

see that the most important economic mammals of China are very much like our own. In most cases the species are different in the two countries, but from an economic point of view this makes no difference. I have presented to the reader a rather long list, and I hope I have been able to correct in his mind the common notion that China is lacking in wild mammal life. A full list of the mammals of China would mount up into the hundreds.

BOOK DEPARTMENT

NOTES

American Sociological Society, Publications of the. Vol. v. Pp. vi, 267. Price, \$1.50. Chicago: University of Chicago Press, 1911.

The papers and proceedings of the fifth annual meeting of the American Sociological Society, which was held in December, 1910, were first printed in the *American Journal of Sociology* and are now issued in book form.

Barton, Mary. *Impressions of Mexico.* Pp. xi, 163. Price, \$3.00. New York: Macmillan Company, 1911.

Boas, Franz. *The Mind of Primitive Man.* Pp. x, 294. Price, \$1.50. New York: Macmillan Company, 1911.

Bolton, F. E. *Principles of Education.* Pp. xii, 790. Price, \$3.00. New York: Charles Scribner's Sons, 1911.

In this volume the author, who has been director of the School of Education at the State University of Iowa, has apparently given us a digest of his notes on the entire field of education. It is a source-book on educational problems rather than a monograph. The author has delved into many books and reproduces here many interesting and valuable discussions. Now no man can be master of so varied materials, and in some cases it would have been better had the author presented the evidence without attempting to prove the correctness of his own position. The text is readable, but sometimes is too rambling. There is no apparent reason for the order of the chapters, and, as the author admits, any other would be quite as good.

Aside from these defects the volume has certain definite value. It contains the ideas of an experienced and thoughtful teacher on the various problems of teaching and education,—terms by no means synonymous. It brings together in available form a mass of scattered evidence bearing on these questions. Finally it is one of the few volumes which recognizes that a physical being—the boy, girl, man or woman, is the subject of the educational process, not some machine made of inert matter. Heredity, environment, both social and physical, growth, food, fatigue, etc., must be studied carefully if our methods are to be intelligent. Instinct, memory, emotions, motor reactions, imaginations and kindred topics are included as well.

Irrespective of the value of the author's conclusions on many topics, the volume will be stimulating and helpful to all who are interested in education.

Bonser, F. G. *The Reasoning Ability of Children of the Fourth, Fifth and Sixth School Grades.* Pp. vii, 133. Price, \$1.50. New York: Columbia University Press, 1910.

An attempt to establish some dependable tests of the intellectual capacity of children of certain school grades and incidentally to contribute to an

understanding of retardation, classification and promotion in school, sex as a factor in mental differences, and general mental development.

The tests were devised to determine the mathematical judgment, controlled association, selective judgment, and intellectual interpretation of literature, the last of somewhat doubtful value as a measurable test of reasoning power. The questions were well selected, although stated too largely in terms of school experience to make the results of the greatest value. Three hundred and eighty-five boys and 372 girls of one public school were tested. The work is carefully done, well tabulated and graphed and the conclusions sound.

The most valuable conclusion is, "that in most of the groups of the youngest twenty-five per cent in each grade show higher ability than the oldest twenty-five per cent, and sometimes higher than that of the median ability of the whole grade. These facts suggest that perhaps the worst type of retardation in the schools is the withholding appropriate promotion from those pupils who are most gifted, therefore of the most significance as social capital."

Calvert, A. F. *Valencia and Murcia*. Pp. xvi, 333. Price, \$1.50. New York: John Lane Company, 1911.

More than any other part of Spain the southeast provinces are neglected by tourists. Less accessible and less attractive in climate, they are passed by, though their history is no less heroic and their civilization no less unique than that of the Basque provinces, Leon and Granada. Mr. Calvert, in the forty-five pages of this book which are devoted to text, gives us the setting of these provinces in the great struggle of Rome and Carthage and their brilliant history during the Moorish occupation. More interesting still is the description of the present-day life made familiar to students of Spain by the writings of Vincente Blasco Ibañez. The marvelous irrigation system which keeps the provinces from the fate of the Sahara which would otherwise be their lot is graphically described. The curious extra-legal water-courts which regulate the distribution of the river resources of the country and the survival of a characteristic peasant life make the region one which deserves more attention than is usually given.

The chief attraction of the volume, however, is its illustrations, which occupy almost three hundred pages and make it a more accurate picture of Spain than it would be possible to give in any other way.

Castle, W. E. *Heredity*. Pp. xii, 184. Price, \$1.50. New York: D. Appleton & Co., 1911.

There is a steady increase in the number of books bearing on the problems of heredity and the practical applications of the newer knowledge. The present author is professor of zoology at Harvard University, and is recognized as an authority. So far, we believe, he is the only experimenter who has succeeded in removing the ovaries of an animal and substituting therefor those of another, and then studied the offspring to see if this change affected them. That such things are now being done indicates the great development of recent biology.

This volume is based on two series of lectures. Some of the chapter titles indicate the contents: The Duality of Inheritance; Germ Plasm and Body; Mendel's Law, The Evolution of New Races; Effects of Inbreeding; Heredity and Sex. Diagrams and illustrations are much used to supplement the text.

Though the last word has probably not been spoken on Mendelism, the author clearly indicates how important a role it is playing in biology to-day. The volume is not too technical for the general reader who is not in a hurry. It is to be highly commended.

Clark, A. H. *The Clipper Ship Era: An Epitome of Famous American and British Clipper Ships, Their Owners, Builders, Commanders and Crews. 1843-1869.* Pp. xii, 404. Price, \$2.00. New York: G. P. Putnam's Sons, 1911.

The serious student of commerce as well as the general reader of books upon commercial affairs will welcome this interesting narrative in which a man of mature years has recounted his long personal experience with the famous clipper ships of the American merchant marine in its period of greatest activity. The author says of himself and of the sources of his information: "Many of the clipper ships mentioned in this book, both American and British, were well known to me; some of the most celebrated of the American clippers were built near my early home in Boston, and as a boy I saw a number of them constructed and launched; later, I sailed as an officer in one of the most famous of them, and as a young sea captain knew many of the men who commanded them. I do not, however, depend upon memory, nearly all the facts herein stated being from the most reliable records that can be obtained."

A volume such as this is to be judged, not with reference to its literary integrity, but as a contribution to the sources of information available for present and future students. The spirit of the men who made the merchant marine famous in the days of wooden sailing vessels is admirably presented in this narrative of personal experience.

The work begins with a brief account of American shipping to the close of the War of 1812; then follow two historical chapters on British and American shipping from 1815 to 1850; the remainder of the book and the major portion of the volume consists of an account of the clipper ships built for the trade with China, with California and with Australia.

Currier, C. W. *Lands of the Southern Cross.* Pp. 401. Price, \$1.50. Washington: Spanish-American Publication Society, 1911.

Ferrero, G. *The Women of the Caesars.* Pp. x, 337. Price, \$2.00. New York: Century Company, 1911.

In his "Women of the Caesars," Professor Ferrero has given a most interesting insight into the life and spirit of the Augustan age. The book is written rather in popular than scientifically historical form, but Professor Ferrero's reputation as a historian would lead us to accept at their face value the facts which he presents. The style is easy and rapid; the illustrations

are excellent and add greatly to the interest of a book which is a striking addition to the increasing list of contributions now reanimating classic historical situations.

Fisher, E. J. *New Jersey as a Royal Province, 1738-1776.* Vol. XLI of "Studies in History, Economics and Public Law," Columbia University. Pp. 504. Price, \$3.00. New York: Longmans, Green & Co., 1911.

The comprehensive work by E. P. Tanner upon "The Province of New Jersey, 1664-1738," has been continued and admirably supplemented by E. J. Fisher in a study upon "New Jersey as a Royal Province." Successive chapters discuss the powers and activities of the governor, the council and the assembly. These three chapters take up the first hundred pages of the book; then follows an exposition of the legislative history of the Morris, Belcher and Franklin administrations. There are discussions of the proprietary system and the land troubles, of boundary disputes and the judicial and financial systems of New Jersey in the intercolonial wars, of religious and social conditions, of New Jersey and parliamentary taxation, and of the overthrow of royal government. The work closes with an account of the establishment of the state government of New Jersey in 1776. Mr. Fisher's work, like that of Mr. Tanner, is scholarly and thorough. It is a credit to those under whose supervision the work was done, as well as to the author.

Fisher, Irving. *The Purchasing Power of Money.* Pp. xx, 505. Price, \$3.00. New York: Macmillan Company, 1911.

Fiske, John. *American Political Ideas.* Pp. lxxv, 196. Price, \$1.50. Boston: Houghton, Mifflin Company, 1911.

In June, 1879, Fiske delivered a series of six lectures at University College, London, on the subject of America's place in history. So successful were these that Huxley requested a series of three lectures before the Royal Institution of Great Britain. These lectures, delivered in May, 1880, were published in America in 1885, and are now re-printed, with the addition of an address, entitled "The Story of a New England Town," delivered at Middletown Conn., October, 1900, and the whole is prefaced by a lengthy introduction by John Spencer Clark.

This introduction, written by an intense admirer of Fiske, is chiefly devoted to a discussion of Fiske's excellent literary style. It also includes a number of letters, written by Fiske to his wife during the period of his lecturing in England. In these letters the vigorous enthusiasm and somewhat boyish egotism of Fiske are clearly brought out.

The lectures themselves show Fiske at both his best and his worst. They are full of striking analogies and suggestive generalizations, and show the broad grasp of the field of history and of the process of social evolution for which Fiske is famous. At the same time they contain some obvious flattery for English consumption, and facts are somewhat distorted to support preconceived theories. The fundamental idea underlying all the lectures is the value of the federal principle of government, and the climax is reached in a prophecy of the "manifest destiny" of ultimate federation in Europe,

with "a world covered with cheerful homesteads, blessed with a Sabbath of perpetual peace."

Gettell, R. G. *Readings in Political Science*. Pp. xli, 528. Price, \$2.25. Boston: Ginn & Co., 1911.

Gillpatrick, W. *The Man Who Likes Mexico*. Pp. 374. Price, \$2.00. New York: Century Company, 1911.

One cannot avoid a certain feeling of disappointment in reading Mr. Gillpatrick's book. In some quarters expectations had arisen that the work would not only give an interesting view of the development of Mexican social conditions, but would also contain a broad philosophic treatment of the course of Mexican political development. That the book does not contain any such material is due not to any fault of the author, but to misleading information as to the author's purpose.

Mr. Gillpatrick has given us an exceedingly readable book of his impressions in different sections of Mexico, and throughout his work he shows a broad-minded sympathy with the point of view of the Mexican population. It is refreshing to read an American author with the broad, catholic sympathy which pervades every chapter of this work. This quality alone makes the work well worth reading to any person interested in Latin-American affairs. The book is a description of personal experiences in travel. While, therefore, an exceedingly readable book it cannot be classed as an important contribution to our knowledge of Mexican affairs. The author has admirably fulfilled the task which he set out to perform, namely, to recount his personal experiences in the course of a most interesting trip through Mexico.

Goodnow, Frank J. *Social Reform and the Constitution*. Pp. xxi, 365. Price, \$1.50. New York: Macmillan Company, 1911.

Green, John B. *Law for the American Farmer*. Pp. xvi, 438. Price, \$1.50. New York: Macmillan Company, 1911.

Some of the larger and all of the more progressive colleges of agriculture have seen the necessity during the last decade of introducing certain social science courses. Botany, biology, chemistry, physics and the other sciences so closely related to the production of crops, live-stock and their products have held first place heretofore. After these came advanced courses in reading and writing and arithmetic. Now courses in economics, especially rural or "agricultural" economics are being introduced; also, rural sociology, rural political science, and, finally, rural law.

This product from the pen of Mr. Green, of the New York bar, is admirably adapted as a text for a course in rural law. It will fill the place in agricultural colleges now filled by the many texts on commercial or business law in other colleges. The field is new and the book stands practically alone.

In addition to its usefulness in the classroom and in the hands of advanced students in colleges of agriculture it should find a place on the shelves of intelligent, progressive, reading farmers in all parts of the country.

Its purpose is to serve the thinking farmer in much the same way as general works on business law serve other business men. The text is systematic, brief and clear; the selection of cases referred to seems to have been made with the greatest care; the index is exhaustive and well arranged.

Haines, H. S. *Problems in Railway Regulation*. Pp. vii, 582. Price, \$1.75. New York: Macmillan Company, 1911.

Harley, J. H. *The New Social Democracy*. Pp. xxvii, 245. Price, 6s. London: P. S. King & Son, 1911.

Another thinker, with keen analytical mind, has joined in the battle for "The New Social Democracy." Although the work is in a large measure historical, carrying us through the various stages of development from the theories of Marx and the visions of others somewhat later, to the schemes for social reform of many modern political leaders and economists the writer has succeeded in his effort to show the present trend and to picture the social democracy which is to be.

The present struggles in the various countries carrying us closer to the new social democracy are briefly summarized and the points common to all are laid bare. In all of this the author has placed special stress on two things, first, the rapidity with which results are being secured, and, second, the significance of the revolution in art and religion when correlated with the changes in economic and political status. Early in the volume the author clearly sets forth what he conceives to be the clear line between economics and politics. Although one may disagree with many statements and conclusions the book must be rated as well conceived. The reader is forced constantly to accept or reject parts, else he will be carried to a position clearly contrary to that commonly held.

Hobson, J. A. *The Science of Wealth*. Pp. 256. Price, 75c. New York: Henry Holt & Co., 1911.

The author has condensed a previous work, "The Industrial System," into the present handy volume. The involved reasoning and scientific atmosphere of *The Industrial System* are wholly absent in the present work, which aims to set down in its simplest terms the mechanism involved in the maintenance of modern society.

The book frankly takes the "wealth" viewpoint, treating business as a mechanism. After an analysis of the workings of the industrial system, the author discusses cost and surplus, wages, profits, exchange, price, the labor movement, state socialism and foreign trade.

The section on state socialism is hardly an integral part of the work. The rest of the material, however, is coherent, with the exception of the last section, which deals rather irrelevantly with "Human Values." In this book Mr. Hobson has added no permanent scientific contribution to his previous ones. The only justification for its existence is that, if read by the uninitiated, it will be reasonably comprehensible.

Holmes, T. R. *Caesar's Conquest of Gaul*. Pp. xxxix, 872. Price, \$7.75. New York: Oxford University Press, 1911.

Howard, Leland O. *House Fly--Disease Carrier.* Pp. xix, 312. Price, \$1.60. New York: Frederick A. Stokes Company, 1911.

The larger wild animals were once considered man's most dangerous enemies because he had to meet them in open combat. Now we are coming to realize that many of the smallest insects are even more dangerous because their attacks are veiled and insidious. In view of our newer knowledge of disease there is need for accurate descriptions of the life history and habits of some of these insects. Among the most important are the flies, particularly the house fly.

Mr. Howard meets this need in excellent fashion. His volume contains five chapters: (1) Zoological Position, Life History and Habits; (2) The Natural Enemies of the Typhoid Fly, a name applied by the author to the house fly; (3) The Carriage of Disease by Flies; (4) Remedies and Preventive Measures; (5) Other Flies Frequenting Houses.

It would be well if every householder would read this book and follow its advice. Merely keeping the flies outdoors is not enough. Warfare should be waged against them to destroy them and prevent reproduction. It is to be hoped that this book is a forerunner of others, dealing with the problems of public health, which are to-day so little appreciated outside the medical profession.

Huntington, E. *Palestine and Its Transformation.* Pp. xvii, 443. Price, \$2.00. Boston: Houghton, Mifflin Company, 1911.

Johnson, W. E. *The Federal Government and the Liquor Traffic.* Pp. 275. Westerville, Ohio: American Issue Publishing Company, 1911.

This little volume contains a large amount of information concerning the relation of the federal government to the liquor traffic. Unfortunately, the subject is presented from the most partisan point of view and is intended to provide material for the temperance advocate and reformer. The author has but recently resigned as chief special officer of the United States Indian Service because of complications arising over his strenuous attempt to suppress the liquor traffic among the Indians. Whatever scientific value the work possesses, therefore, will be heavily discounted because of the radically propagandist attitude of the author. Nevertheless, he has reprinted many laws, orders, rules, etc., relating to the liquor traffic together with their specific references. These will make the work a valuable hand-book of such information for those to whom the original sources are relatively inaccessible.

Kimball, Everett. *The Public Life of Joseph Dudley.* Pp. viii, 238. Price, \$2.00. New York: Longmans, Green & Co., 1911.

This is a well-written book upon a most interesting period in the colonial history of Massachusetts. The struggle of the Massachusetts colony with the home government during the governorship of Joseph Dudley is discussed with exceptional clearness. But few doctors' theses, even when elaborated as this has been, become of such interest and permanent value.

Leiserson, W. M. *Unemployment in the State of New York.* Pp. 172. New York: Columbia University, 1911.

Dr. Leiserson has prepared a thoroughly comprehensive study of unemploy-

ment in the State of New York and in Europe. In this sense the title is misleading, as only three-fifths of the material deals directly with New York. However, the unemployment figures of the New York Bureau of Labor Statistics are excellently charted, and the data regarding unemployment, while incomplete, are of a very suggestive character.

McGrath, T. S. *Timber Bonds*. Pp. 504. Price, \$3.00. Chicago: Craig-Wayne Company, 1911.

This book is one of the best intensive studies of a particular class of securities which has appeared within recent years. Beginning with a review of the methods of examining timber properties, the author proceeds to outline the procedure in the formation of underwriting syndicates for timber bonds, goes fully into the contracts between the bankers and the owners for the delivery of the bonds, and makes an admirable study, including many valuable specimen illustrations of trust deeds and types of timber bonds. Following this come over one hundred pages of typical bond circulars, showing the methods used by bankers in advertising these issues and the sort of information which is furnished to the investor. The remainder of the volume is given up to a discussion of sinking funds for timber bonds and a concise and valuable collection of definitions of words and phrases commonly encountered in connection with this class of security.

Oppenheim, J. *Pay Envelopes*. Pp. 259. Price \$1.25. New York: B. W. Huebsch, 1911.

The art of any age interprets the relation between men and their environment. The author maintains that, if American literature is to be made permanent, it must fulfill this artistic concept. In pursuance of this view, Mr. Oppenheim has brought together a series of stories dealing with the life of the industrial worker. All of the situations are dramatic. The social atmosphere of the tenement and court is keenly marked, and the author has presented in brief compass a gripping concept of workmen's lives. Mr. Oppenheim's style is always easy and rapid. The present volume indicates clearly that the author's early promise will doubtless be fulfilled.

Outlines of Economics. By members of the Department of Political Economy, University of Chicago. Pp. xvi, 144. Price, \$1.00. Chicago: University of Chicago Press, 1910.

Ordinarily a teacher makes little classroom use of the questions appended to the successive chapters of the average text-book in economics. He usually prefers to work out questions of his own in harmony with particular ways of developing the subject-matter of a text. The merit of these Chicago *Outlines* is their double serviceability. Because of richness in the quality of suggestion, they can be used even by a teacher of a high degree of original bent in working out a scheme of his own; or the *Outlines* can be placed directly in the hands of students as a means of arousing an inquiring attitude of mind such as mere independent reading of a text-book and of collateral references is powerless to arouse. The questions and problems should prove especially serviceable in the larger college classes. Here, courses need to

be standardized because of the large number of instructors in charge of sections. These Outlines do standardize, and at the same time they leave freedom for the display of individuality on the part of the instructor.

Overlook, M. G. *The Working People: Their Health and How to Protect It*. Pp. 293. Price, \$2.00. Boston: Boston Health Book Publishing Company, 1911.

Oyen, Henry. *Joey, the Dreamer*. Pp. 318. Price, \$1.20. New York: Doubleday, Page & Co., 1911.

Priddy, Al. *Through the Mill*. Pp. xi, 289. Price, \$1.35. Boston: Pilgrim Press, 1911.

Joey is the hero of another's story. Al Priddy writes an autobiography. In both cases the life of the mill boy is pictured. The stress of work; the strain of wage cuts and hard times; the long Saturday afternoons before the machine; the enervating summer atmosphere of a great city court, and the sharp struggle for bare existence are all strikingly pictured in both books. The style in both is crude and seriously lacking in form and polish, but the books themselves breathe the same social spirit which animates the work of such well-known authors as David Graham Phillips and Robert Herrick. No previous attempts at portraying child life in industry have met with a tithe of the success which these two books merit.

Pankhurst, E. S. *The Suffragette*. Pp. 517. Price, \$1.50. New York: Sturgis and Walton Company, 1911.

"The Suffragette," by E. Sylvia Pankhurst, gives a most interesting and detailed account of the militant suffrage movement in Great Britain. Miss Pankhurst carefully explains the origin, methods and results of the movement, and comments upon its effectiveness. The book is written in the form of a history and follows the chronological order. The style is very graphic; indeed, the enthusiasm, courage and steadfastness of the writer, infused as they are into the thread of the narrative, cannot but give inspiration to the reader. While Miss Pankhurst's method of presenting her evidence and her verification of the data given are beyond reproach, it must be remembered that the viewpoint of the writer is distinctly partisan. A narrative history to be perfectly accurate and reliable should be written from the viewpoint of the observer, not from that of one in the heart of a great struggle.

Parsons, Frank. *Legal Doctrine and Social Progress*. Pp. 219. Price, \$1.50. New York: B. W. Huebsch Company, 1911.

For those who have regarded law as the bulwark of privilege, this volume will be a revelation. Such an abuse of law is possible, but by no means necessary or inevitable. In reality law is a live, changeable and adjustable instrument which ministers to the stability of society, while at the same time it yields to the demands of progress. It is quite as possible for law to become the instrument of democracy in accomplishing social gains as to be used as the tool of vested interests. As a matter of fact, this evolutionary method of securing gradual changes in the adjustment of law to new social

conditions is gaining force and the old static concept of law is being abandoned. Law in the mind of the author is a reservoir of social progress.

The book is the last literary product of Professor Parsons and is alike valuable to the student of law who needs to regard law from the human point of view rather than from that of mere statutory enactment, and to the social reformer who may profit by a better understanding and use of this most important means of social control.

Perkins, J. B. *France in the American Revolution*. Pp. xix, 544. Price, \$2.00. Boston: Houghton, Mifflin Company, 1911.

Pratt, Edward E. *Industrial Causes of Congestion of Population in New York City*. Pp. 259. New York: Longmans, Green & Co., 1911.

The great congestion of population in New York City is due to both social and economic factors. In his first chapter, Dr. Pratt presents a splendid summary of the New York congestion problem, showing by statistical charts and diagrams its extent and location. The major part of the work covers a detailed investigation based upon information secured direct from manufacturers and workers. The number of cases considered is large enough to justify the inference that manufacturing has, during the past two decades, concentrated rapidly in lower Manhattan, and that labor, particularly ill-paid labor, tends to settle in the immediate neighborhood of its work-place.

Nevertheless, a strong sentiment is developing in favor of a movement away from the densely built district of lower Manhattan. "This movement may not be strong enough to entirely rid Manhattan of factories, but it will, no doubt, bring about a considerable change in the industrial complexion of the city. It further seems evident that the workers will in the future, as they have in the past, endeavor to live near their places of work."

Continuing his discussion, the author states that the most obvious remedies for congestion are: "(1) Improved transit facilities; (2) restriction of immigration; (3) limitation of the working day; (4) introduction of the minimum wage; (5) prohibition of tenement manufacture; (6) removal of the slum population to farm colonies; (7) education of the people; (8) erection of cheap houses in the suburbs; (9) city planning, including the segregation of factories; (10) founding of suburban industrial centers."

In the introduction, which is a brilliant summary of the entire problem of congestion, the author disclaims any intention of proceeding outside of the realm of industrial causes. Nevertheless, in the use of his data, he considers effects rather than causes of congestion, and his concluding chapter is largely devoted to "remedies." While in this minor respect unscholarly, the book is, on the whole, a distinct contribution to our knowledge of the causes of congestion.

Spiller, G. (Ed.). *Inter-racial Problems*. Pp. xlvi, 485. London: P. S. King & Son, 1911.

The First Universal Races Congress, which held its sessions in London during July, 1911, considered a variety of subjects from the meaning of race,

through its anthropological and sociological significance, to the detailed problems involved in international law and international peace.

The first session of the conference was devoted to such fundamental considerations as were involved in defining the purpose of the conference. At the second session, environment, language, customs and race differences and race types furnished the topics. The third session was devoted to race problems, as they presented themselves in the different countries represented at the conference. International finance, immigration, science and art formed the topics of the fourth session. The fifth and sixth sessions were devoted to the relation of modern progressive thought to the racial problems. Included in a discussion of international racial ethics were traffic in intoxicants and opium and the position of the American Negro and the American Indian. At the two final sessions positive suggestions for promoting inter-racial friendliness were discussed.

Despite the divergence in topic, the spirit of the conference, though somewhat academic was progressive. The existence of such a conference indicates a rapid disintegration of antique racial prejudice. Its work should constitute an important step in the upbuilding in inter-racial good-will.

Wiley, Harvey W. *Foods and their Adulteration.* Pp. xii, 641. Price, \$4.00. Philadelphia: P. Blakiston's Son & Co., 1911.

From this second edition Dr. Wiley has omitted his discussion of the national pure food law and its interpretation, writing instead a generous section on infants' and invalids' foods, together with a discussion of methods for detecting food adulterations. His discussion of infant feeding constitutes an excellent source for the students of infant mortality. His entire work will commend itself now, as heretofore, as the thoughtful product of a careful student.

REVIEWS

Abbott, F. F. *A History and Description of Roman Political Institutions.* Pp. viii, 451. Price \$1.50. Boston: Ginn & Co., 1911.

This book is intended to serve as an introduction to the study of Roman political institutions, especially for the student of Roman life and literature. The subject is treated from both a historical and a descriptive standpoint. Part I deals with the monarchical period; Part II with the republican; Part III with the imperial. Each of these periods is then subdivided under two heads. First a chronological account of the origin and development of Roman political institutions shows the inter-relation of the parts and gives a final picture of the Roman constitution as an organic whole. Then a description of each institution gives a clear idea of its structure and function. The treatment of imperial officials and of judicial procedure is especially good.

This volume will prove particularly valuable to those who are working in the border land between history and languages. The teacher of Latin will find it useful in correlating the study of the ancient language with the

development of those institutions whose influence is powerful even in modern life. The teacher of history will find it an excellent outline of the characteristic institutional development of those people who contributed most to modern governmental ideas and methods, yet whose work is usually taken for granted, rather than studied and understood.

The chief criticism that may be urged against the book is that its brevity gives somewhat distorted impressions of certain institutions, and necessitates somewhat dogmatic statements regarding controverted points. These faults are offset by marginal references to sources and by extended bibliographies by whose aid the reader may easily find more extended discussions of the points at issue.

An appendix contains well selected examples of senatorial documents, actions of the popular assemblies, edicts and inscriptions together with brief passages from Latin writers dealing with political institutions.

RAYMOND GARFIELD GETTELL.

Trinity College.

Bonar, James. *Distributing Elements in the Study and Teaching of Political Economy.* Pp. 145. Price, \$1.00. Baltimore: Johns Hopkins Press, 1911.

The publication of this volume puts in permanent form the five lectures delivered by the author during April, 1910, before the Economic Seminary of Johns Hopkins University. The two following paragraphs from the preface throw light on the nature of the work:

"As the title suggests, they [the lectures] are discourses not on economic error in general, but on the more subtle fallacies which are apt to invade the reasoning of trained economists in spite of learning and discipline.

"Such errors creep in from a popular political philosophy (Lecture I), from want of any political philosophy (II), from mistaken aversion to theory (III), from the shortcomings of common or technical language (IV), and from the wrong handling of distinctions of time (V)."

In the first lecture, entitled "Liberty, Equality, Fraternity," the author maintains that "without fraternity in the form of organization of smaller groups than nations, it will be difficult to preserve what was long the most precious feature of the economic world in English speaking America,—the independent labourer." . . . "With due care and pains on the part of both of you [Canada and the United States] there need not be any proletariat at all." . . . "In a proletariat there is little liberty and little true fraternity; there is something like an equality of suffering and degradation. If the watchwords would keep us mindful of this great duty, it would be well to hear their music every day, even in our study."

In the second lecture, entitled "Government is Founded on Opinion," it is pointed out how frequently public opinion is unscientific and needs enlightenment. "If the economist should not be guided by public opinion, he should try to guide it, recognizing that error is possible which he must help to remove."

. The third lecture dissects the phrase so frequently heard, "It may be so

in theory," and shows wherein its use is the mark of an untrained mind since theory and practice are as inseparable as an object and its shadow.

Lecture IV likewise analyzes another popular expression, "Figures can prove anything." In this discussion the point is well made that economics has suffered in having borrowed terms from the physical sciences which at best could be but analogous since economics of necessity has its own distinct group of phenomena to describe.

In the concluding discussion with the caption, "In the Long Run," "economic tendencies" are discussed. It is pointed out that while there is no saving virtue in the "long run" there is no necessary fallacy in the phrase. All wise national policies should include this "long run" view.

The lectures are scholarly and written from the social viewpoint. They are addressed primarily to students of economics. They should be of particular interest to Americans since they are written by a foreigner.

FRANK D. WATSON.

New York School of Philanthropy.

Bracq, J. C. *France Under the Republic*. Pp. x, 376. Price, \$1.50. New York: Charles Scribner's Sons, 1910.

France has suffered much from adverse criticism, most of it superficial. Even some of the French themselves have looked upon their future through dark glasses. Mr. Bracq shows us the other side of French life, though one must admit that the attitude adopted is at times too complaisant toward facts which should prove disquieting. It seems for example that the population question should have more than a single page and foreign and colonial relations deserve more than the passing mention accorded them. But the book lacks because the reader wants so much rather than because of what it contains. It is brilliantly written. The description of the advance in commerce and in national wealth, the contributions which the republic has made to the fine arts, and the active part which public welfare has come to play in the politics of France convince one that French life is still at bottom sound and vigorous.

A prominent place in the discussion is given, as would be expected to the absorbing discussion of the relation of the church to the state and especially to education. Schools have multiplied, there are no longer discriminations between rich and poor in common school instruction. Teachers are better trained, schoolhouses better equipped, in short, the lay schools have proved themselves an unqualified success. A detailed defense against the charge that the schools are atheistic is supported by quotations from textbooks which make out a good case.

Separation of church and state the author believes is proving a blessing even to the church which feared it. "The Catholic Church of France has never had more earnestness in its priesthood," . . . though "this can scarcely be said of the regular clergy, i. e., the members of monastic organizations." The work of the church in philanthropy is given hearty praise. The suppression of the unauthorized orders and separation of church and state will,

the author insists, put the church on a healthy basis. It will go a long way toward removing the church from politics, a condition that has in the past limited its usefulness.

Mr. Bracq's work is an excellent picture of the more encouraging features of contemporary French life. It will be of interest not only to the political scientist but to the general reader who keeps up with the facts of social progress.

CHESTER LLOYD JONES.

University of Wisconsin.

Bridgman, R. L. *The First Book of World Law.* Pp. v, 308. Price, \$1.65. Boston: Ginn & Co., 1911.

Three recent books, Reinsch's "Public International Unions," Mr. Bridgman's "World Organization" and this volume, mark a departure in the literature of international law. They deal with those parts of the subject which most nearly approach the nature of municipal law, because they have the definite acceptance of the signatory nations through formal acts adopting certain common standards as a part of their own law.

The "First Book of World Law" gathers together the facts which prove that there is in process of development a world government of three departments. There is a world legislature now assured in The Hague Conferences succeeding the earlier conferences of groups of powers which met at the close of periods of war; a world judiciary is appearing in The Hague Court destined to be the beginning of a system of courts with ever widening jurisdiction which will control international affairs; and, finally, the beginnings of a world executive, very humble, it must be admitted, the author finds in such offices as the secretary of the Universal Postal Union and the international committee on weights and measures.

The central portion of the book is given over to a publication of great international acts which have been accepted by a number of states large enough, in the author's opinion, to justify calling the acts world law. Detailed presentation is given the subjects covered by the Universal Postal Union, arbitration, navigation, international sanitation, repression of the African slave trade and the Red Cross. Each division is accompanied by explanatory comments. Minor agreements, accepted by fewer nations, are given in more summary form.

Essentially a reference work, it is probably true, as the author says, that "no person perhaps will wish to read it all, any more than he wishes to read all of his encyclopedia" but no library should neglect to give its patrons access to this material and no one, who wants a review of what has been accomplished in recent international law-making, should neglect the opening and closing chapters of the book. Few of those even who were active in the framing of the various acts, probably realize to what a degree "world law" exists, without a concrete record such as this.

CHESTER LLOYD JONES.

University of Wisconsin.

Brummer, S. D. *New York State during the Period of the Civil War.* Pp. 451. New York: Longmans, Green & Co., 1911.

Porter, George H. *Ohio Politics during the Civil War Period.* Pp. 255. New York: Longmans, Green & Co., 1911.

The authors of these two volumes are to be congratulated on their contributions to the new but important and difficult field of state history during the Civil War. With two lines of development, state and national, in our history, going on at the same time, each influencing the other and each in turn influenced by the other, it is difficult for the student to devote himself to the one and at the same time correctly interpret the other; the difficulty is particularly liable to arise from 1861-1865, when probably the most powerful influences in state politics came from the nation at large. But this difficulty the authors solve in general in a commendable fashion. In every case, to be sure, the reader will not accept Dr. Brummer's and Dr. Porter's judgment as to the emphasis to be laid on the national field; for example, many will look in vain for a fuller treatment by both authors of the military situation in 1862 and 1864, and the sway in this way exercised on the states. In the latter year the victories and defeats on the field of battle most dramatically governed the ups and downs of state affairs, and so did the presidential campaign of the same year; yet both these movements seem to receive insufficient recognition. The authors here are sticking too closely to their subject.

While the volumes deal mainly with political conventions, platforms, leaders and speeches, some readers would demand a fuller treatment of popular conditions. In this connection, the subject of arbitrary arrests and imprisonment readily lends itself to picturesque treatment of individual cases, such as may be found in the pages of the *New York World*.

The positive contributions of the authors hinge, first upon the development of party politics in New York and in Ohio, the states of Seymour and Vallandigham. The growth of the Weed-Seward and Greeley factions among the republicans in New York, the causes of this rivalry, and its influence on national affairs, are related by Dr. Brummer in great detail and with great interest. Probably no one has so well described the political issues of the New York campaign of 1862, which resulted in the election of the democratic candidate, Seymour, as Governor, and the same interest attaches to the description of the progress of the Seymour administration. Factional quarrels in Ohio were not as important as in New York, but the peace democracy under the Ohio leader, Vallandigham, affords Dr. Porter abundant opportunity for intensive study, and this task he very creditably performs.

The second important contribution of both authors is the same, emphasis on the work of the so-called union party. Says Dr. Porter: "The republican party, which had been formed in 1854, was never revived in Ohio after its demise in 1861. The issues on which it had been formed were settled by the war. The new party, formed in 1861, outlived the war, and continued its existence with new issues. The present republican party is not, therefore,

a successor of the organization of 1854, but rather of the union party of the war period." Dr. Brummer believes in the disappearance in New York of the same original republican party. The conclusion seems to be too strong. As a party trick, to win votes at a time when republican votes were very essential, the name of the republican party was indeed changed, but never the principles. The republicans did not believe that they joined a new organization; they merely sought recruits by a ruse. It was certainly good republican policy in 1861 to oppose compromise on the question of territorial slavery, and later to insist on the positive prohibition of slavery there, and as a great anti-slavery organization the party naturally advanced into other anti-slavery policies as the war advanced. It must be remembered, too, that the number of voters in the union party, who were not republicans, was small, that the normal democratic strength of 1860 fell off but little, that that of the republicans, as seen in the union vote, increased but little, and that the formal union organization was very different in different states. It is best to look upon the union organization not as a new party, but only as a temporary manifestation of the republican party during a short period and under peculiar circumstances. This criticism of their conclusions must not, however, be allowed to detract from the authors' success in investigation and orderly presentation of difficult material.

EMERSON D. FITE

Yale University.

Chadwick, F. E. *The Relations of the United States and Spain; The Spanish War.* Two vols. Pp. xx, 926. Price, \$7.00. New York: Charles Scribner's Sons, 1911.

Military training, participation in the war and exceptional access to material make Mr. Chadwick's account of the Spanish War unusually valuable. A large part of this "documentary history," as the author calls it, is formed of well chosen selections from the sources. His personal opinions are kept in the background except perhaps in the discussion of the Sampson-Schley controversy, in which Mr. Chadwick believes great wrong was done to Sampson, one of the noblest of public servants.

The most interesting feature of this work is the extensive presentation of the Spanish point of view in the war, until now a field neglected by American writers. No evidence could show more conclusively the reason why the American victories were won so easily than the quotations from the despatches exchanged between the Spanish ministry and Cervera. Unpreparedness, inefficiency of administration and inadequacy of fighting material are shown to have existed in the Spanish navy to a degree greater even than in our own War Department. On the other hand, the performance of the United States navy comes in for praise which the evidence submitted seems to show is justified. Under the circumstances, which the despatches of the Spanish admiral show were known but persistently disregarded by the Spanish ministry, the outcome could not have been other than a foregone conclusion. When a country is willing to order to sea vessels which it

knows are unable to cross the ocean, but will become "useless buoys" in mid-Atlantic, it speaks eloquently of the character of the administration. It appears repeatedly that the government of Spain fought not even with the hope of winning, but because some sacrifice was necessary "to satisfy the honor of the nation." Amusing, if the circumstances were not so tragic, would be, for example, the instructions to Camara's squadron which when beginning its outward voyage was to keep "close to shore so as to be seen from Spanish cities, exhibiting when near them the national flag illuminated by searchlights, which are also to be thrown upon the cities."

The land campaigns are described with commendable clearness, though their importance is dwarfed by the brilliant work of the navy. Detailed maps for both army and navy operations make it easy to follow all the movements discussed.

The closing chapters, dealing with the diplomacy of the treaty of peace, are exceptionally well done. Probably in no other war has the inside history been made public property to an equal extent so soon after the conflict. The change in American public opinion and in the plans of the administration which made the "war for humanity" one for conquest and in a few months revolutionized our foreign policy is here presented in a way not previously approached. For Spain, too, the negotiations marked a complete change in national policy. The war destroyed the last traces of the greatest of colonial empires. It stripped the mother country of colonies for which she could no longer care and the loss of which was to prove a blessing in disguise.

Few "documentary histories" combine so well as this, authoritativeness and readability. The vividness of the narrative and its dramatic character make these volumes of interest not only to the student of history, but to the public at large.

CHESTER LLOYD JONES.

University of Wisconsin.

Drage, G. *The Imperial Organization of Trade.* Pp. xviii, 374. Price, \$3.50. New York: Imported by E. P. Dutton & Co., 1911.

The scholarly work of Mr. Geoffrey Drage is maintained at its high standard in his latest work upon the commercial policy of the British empire. This work is stated to be "an installment of a larger work on Imperial Organization, and is published at the present time with a view to advancing the closer union of the empire in trade matters at the next meeting of the imperial conference, which takes place in 1911." The volume was written in 1910, and the conference took place at the time of the coronation of King George and Queen Mary.

The introduction discusses in a general way the development of imperial organization, calls attention to the need of uniformity of legislation throughout the empire as regards various trade matters. The subjects of free trade, imperial preference, retaliation and tariff reform receive extended consideration in separate chapters. A large part of the volume, pages 146 to 297, is devoted to a discussion of tariff reform; the last two chapters of the book

are devoted to a discussion of general tendencies and to a statement of conclusions.

The author's study leads him to the conclusion that it is desirable for Great Britain to organize an "intelligence department to do for the civil affairs of the empire the work now done on naval and military questions by the imperial defence committee"; and that "it is desirable to revise the continental and international treaties in 1914 so as to secure better terms for British trade." The author advocates closer relationship between the different parts of the British empire; he is of the opinion that free trade has in the past produced good results; he believes also that the problem of imperial and commercial integration of the British empire is of greater magnitude than it has been conceived to be by Mr. Chamberlain. After analyzing the conflicting interests of the United Kingdom and of her several colonies, the author urges the necessity for the establishment and equipment of an intelligence department; or, as he states: "We want in fact, (1) the imperial advisory council" meeting from time to time at London, Sydney and elsewhere; (2) "an imperial secretariat, not subordinate to any department but independent and immediately under the supervision of the prime minister; and (3) a permanent imperial commission . . . to prepare subjects for discussion at the conference, to investigate special problems referred to it by the conference . . . and to conduct inquiries, not only on matters referred to it by the conference, but also in connection with the *ad hoc* conferences which have more than once taken place in recent years upon a reference made to them by His Majesty's government and one or more colonial governments."

EMORY R. JOHNSON.

Egerton, Hugh E. *Federations and Unions within the British Empire.*

Pp. 302. Price, \$2.90. New York: Oxford University Press, 1911.

Problems of organization of government, both in the British Isles and in the empire at large, have claimed increasing attention of English writers. Mr. Egerton asks attention to the federations of colonies in British dominions. The discussion is historical and comparative. English materials are well handled. There is some looseness in the discussion of American conditions and authorities. Bryce's "American Commonwealth" appears as "The American Constitution;" New Hampshire is spoken of as an independent colony at a time when it was a part of Massachusetts and the constitution is said to have been "imposed" on the colonies "by the genius of Hamilton and the character of Washington."

The portion of the book devoted to text opens with a brief treatment of early American attempts at federation, then the Canadian legislation, especially the British North America act of 1867 is reviewed, and a detailed criticism is given showing the weakness of the Canadian constitution as to definition of the field of power between the central and local authorities. Similar reviews are given for Australia and the South African Union. Emphasis is placed on the economic necessities which forced the federations.

The last chapter, comparing the constitutions of Canada, Australia and

South Africa, is the best part of the book. The chief points discussed are the uniform adoption of "responsible" government in the federations—though not always in the constituent states; the confidence in the legislatures, so strongly in contrast with recent American practice and theory, and the ease of constitutional amendment.

The last two-thirds of the book are taken up with reprints of constitutional documents illustrating the former attempts at colonial unions and the constitutions of the three great confederations of English colonies.

CHESTER LLOYD JONES.

University of Wisconsin.

Farrand, Max. (Ed.). *The Records of the Federal Convention of 1787*. Three vols. Pp. xxv, 606, 667, 685. Price, \$15.00. New Haven: Yale University Press, 1911.

At first sight it might appear as truly remarkable that not until the present year, nearly a century and a quarter after the adjournment of the federal convention, has a comprehensive and trustworthy collection of the available material relating thereto been assembled and issued in a single work. To one familiar with the history of the records and literature of the convention and the inherent difficulties attendant upon such a task it is not surprising. Its successful accomplishment by Mr. Farrand in the collection under review, therefore, is recognized as a noteworthy achievement.

The incomplete and confused papers kept by the secretary of the convention, William Jackson, were turned over by him after first destroying "all the loose scraps of paper," to Washington, who subsequently deposited them in the Department of State. These, however, were not given to the public until 1819, when, in consequence of an act of Congress, John Quincy Adams, then Secretary of State, undertook the difficult task of collating and editing them. With the assistance of a few of the delegates he prepared a connected "Journal" of the convention. Owing to the unsatisfactory nature of the memoranda, this, the official journal of the convention, contained a number of mistakes, "not a few of which were important," as, for example, the inclusion of the incorrect plan furnished by Pinckney and the wrong assignment of votes, which had been kept on separate sheets. (Cf. I, 32.)

When the seal of secrecy had thus been broken, there followed in 1821 the publication of Yates's "Secret Proceedings and Debates," covering the earlier work of the convention. This was the first of a series of notes and records to be published, which together "far surpass the journal in value." Nothing further of this nature, however, was made public until after Madison's death (1836), when his elaborate notes were purchased by the government and in 1840 were published. "At once," Mr. Farrand truly observes, "all other records paled into insignificance," for Madison's notes, after taking into consideration all other sources now available, still constitute our chief authority for the proceedings of the convention.

During the next half century not much additional contemporary material was made accessible. The accounts of the work of the convention, written by the historians Bancroft, Curtis and others were principally based on

these sources, and their interpretation of its proceedings was generally accepted as correct. Little critical study of the texts of these documents was attempted, nor was any notable effort to assemble a collection of all the notes and memoranda of the delegates undertaken. It was not until men who had been trained in the canons of the modern school of historical scholarship took up the investigation afresh that much additional material was published or new discoveries made. To Dr. J. F. Jameson, who has been pre-eminent in this work, Mr. Farrand appropriately dedicates his collection.

The editor in undertaking this work aimed to accomplish two objects: First, the presentation of "the records of the convention in the most trustworthy form possible," and, secondly, to gather "all of the available records into a convenient and serviceable edition." The plan adopted in the accomplishment of these purposes has been the careful examination and faithful reproduction of the texts of the original manuscripts wherever attainable, as in the case of the "Journal," Madison's "Notes" and King's "Notes," or where the original manuscript has been lost, as is true of Yates's "Notes," from the original edition, or in several other cases from the most authentic texts previously published, such as the series of carefully edited notes and versions which have appeared in the "American Historical Review." All these supplementary records of the convention "take on a new importance," observes the editor, "in view of the fact that the 'Journal' is so imperfect and not altogether reliable and that Madison made so many changes in his manuscript."

The first two volumes contain the official and unofficial versions of the proceedings of the convention, "all the records of each day's session," being brought together, first the entry from the "Journal" for the day, followed by the extracts from Madison's "Notes" and the accounts of Yates, King, McHenry, Paterson, Pierce or any other delegate whose memoranda are applicable. The advantages and convenience of this arrangement are obvious, as it renders possible the ready examination of all the different versions of each day's proceedings, and the several accounts serve to supplement and check each other.

The care which Mr. Farrand has exercised to insure the accuracy of the texts is especially well illustrated in the case of Madison's "Debates," the manuscript of which presents various difficulties. Madison apparently made corrections in his notes after the publication of the "Journal," to harmonize his statements with those of the latter, which in many cases were erroneous. As he had made other changes previously, it is important to distinguish between them. Fortunately this can be done in most cases, as the ink used in inserting the later corrections has faded differently from that of the earlier alterations. To make this distinction apparent the editor has enclosed the later changes in brackets in his version of Madison's text. This is an improvement over any other edition including that in the "Documentary History of the Constitution," in which the attempt to reproduce a literal copy of the original was only partially successful, as no such distinction in the alterations was made.

The third volume is devoted to "supplementary records." These com-

prise a mass of material gathered from "the more obvious and accessible sources" which throw light on the proceedings of the convention. Appendix A contains four hundred and nineteen documents of varying character, chiefly consisting of the letters of delegates written during the sessions of the convention, or statements made by them subsequently, either publicly or in their private correspondence. Another appendix includes the list of the delegates, their credentials and a record of their attendance. It shows that while seventy-four were elected only fifty-five actually served, and many of these were in attendance only a portion of the time. The remaining appendices present the texts of the chief plans before the convention, and all that is known of their origin.

Although the greater number of these documents had been previously printed, they have now for the first time been brought together from widely scattered publications to form a collection comprising nearly everything of value that relates to the work of the convention. Supplementing the texts are a wealth of notes, annotations and cross references to related documents, which greatly enhance the practical value of these volumes. Two indices are provided the one to the clauses of the constitution the other general in character. By means of the first it is possible to trace the evolution of a particular clause. The general index is the only unsatisfactory feature of the work, as it is not sufficiently comprehensive. An exhaustive index was probably thought unnecessary, in view of the index to the constitution and the numerous cross references employed.

It is fitting that due recognition should be accorded to the editor not only for the accuracy and breadth of his scholarship, but also for the painstaking industry required in attending to all the laborious details of the truly stupendous task of assembling, editing and seeing through the press this monumental work. It is destined to be recognized as the standard and definitive edition of the work of the most notable constitutional body ever assembled on this continent.

HERMAN V. AMES.

University of Pennsylvania.

Fisher, H. A. L. *The Republican Tradition in Europe*. Pp. xii, 363. Price, \$2.50. New York: G. P. Putnam's Sons, 1911.

Essays such as these are attractive both on account of their subject matter and because of their literary form. They do not attempt to be exhaustive discussions but to sketch the main outlines of a movement which has now, as the author tells us, done its work and survives in the normal European mind only as a tradition.

The middle ages are dismissed with two short chapters. The monarchical form of government supported by the church, was accepted with but little question. Political thought strongly influenced by political conditions had no room for development. Even in Italy the city republics were essentially unrepubli- can in the modern sense. Nor did the Protestant revolt break down the reverence for monarchy—indeed, at least at first its leaders were

ardent supporters of the established governments. Its influence, though great in breaking down European conservatism, was only indirectly, if at all, a force favorable to popular government. Nor do the seventeenth and eighteenth centuries speak for republican institutions. Even Rousseau failed to show how a republican government could be given to a large and rich state.

But the force of the American example was not lost in Europe, especially in France, where economic conditions and the national spirit were now preparing a revolt against established institutions. But even the French Revolution was not at first one against the king, and against monarchy as an institution there was hardly a voice till 1790. Republican enthusiasm, in fact, was soon overshadowed by the humanitarian enthusiasm for "liberty" and the desire for national glory. The victorious republic of France brought to Europe as a whole the substance of republicanism, though not its form, except in France itself. The breakdown of the old feudal principalities, the introduction of a system of government in which there is a greater degree of popular control, and an increased sense of responsibility on the part of monarchs, these were the permanent benefits which the revolution brought.

Republican enthusiasm continued to grow in Europe till 1848. But the Germans, Italians and Spanish were not won by it to abandon their attachment to monarchy. France itself only did so with great travail and by surrounding the republic with the pomp of the government she had overthrown. Monarchy, the author insists, is now more firmly intrenched than in 1848. Many causes have brought the change. The political intelligence of monarchs has improved. People have come to realize that the form of executive does not measure political or civil liberty. These latter have expanded not at the expense of monarchy, but at the expense of the privileged classes. Social reform has diverted attention from political reform. The successful policies of Bismarck have reawakened the popular confidence in strong monarchy. Finally, imperialism is unrepblican, the monarch is the great symbol of empire. No enthusiasm, the author declares, can be aroused for an elected president in a country composed of such diverse elements as the modern empire. "The republican movement has done its work. Its ideals have been appropriated—into the political system of Europe and most of the domestic programme of 1848 is now fixed—in the institutions of the continent which, save only in France, Switzerland and Portugal retains an explicit devotion to hereditary monarchy."

The ardent republican will find this book filled with a negative message. He who is enthusiastic for the substance, rather than the form of political and social freedom, will find it a chronicle of positive advance. Republican ideals in Europe are by no means a tradition.

CHESTER LLOYD JONES.

University of Wisconsin.

Fisher, Joseph R. *The End of the Irish Parliament*. Pp. xii, 316. Price, \$3.00. New York: Longmans, Green & Co., 1911.

Mr. Fisher's principal object is "to detach and bring into relief the events

connected with the 'decline and fall' of the Irish parliament" (p. vii). The result is a clear, concise history of that institution during the last thirty-three years of its existence, with an introductory chapter on conditions previous to 1767. The style is pleasing.

Although these qualities may recommend the book to the "general reader," for whom it was apparently intended (p. vii), its positive contribution to our knowledge is small. Several volumes of correspondence published by the Historical Manuscripts Commission and the Macartney papers are mentioned in the preface (p. v), but they have not been drawn upon heavily. There are new facts about the corruption during the viceroyalty of Townshend, additional light on the attitude of Pitt and Rutland in 1784 and 1785 towards the questions of reform of the Irish parliament and Irish commercial relations, and items here and there on various aspects of the subject. There is little else that has not been told already by well-known writers.

As a summary of the existing literature on the subject the book is also of doubtful utility. The author states that although hundreds of writers have been consulted, most of them have yielded little (p. vii). Froude and Lecky seem to have furnished the bulk of the material. The works of these historians differ much in critical value, but the author appears to follow sometimes the one, sometimes the other without manifest principles of selection. The scarcity of footnotes adds to the difficulty, and is especially regrettable in the case of citations which constitute a liberal part of his narrative. One-fourth of chapters V and VI, for example, is enclosed within inverted commas. Of these citations over sixty per cent can be found in the pages of Froude and Lecky, where much of it is likewise enclosed. Quotations made both by Mr. Fisher and by Mr. Froude or Mr. Lecky are often presented by Mr. Fisher as statements of contemporaries, but, since he rarely indicates the sources whence he derived such quotations, it is difficult to ascertain whether they are what contemporaries said, or what Mr. Froude or Mr. Lecky said contemporaries said. Since Mr. Froude's citations from original sources are frequently incorrect, this impairs the value of Mr. Fisher's work. His laxity in this respect may be explained, perhaps, by his own disregard for the sanctity of quotation-marks (e. g., pp. 154, 190-191, 227, 269, 311). These inherent characteristics make it necessary to use the book, if at all, with caution.

W. E. LUNT.

Bowdoin College.

Fite, Emerson D. *The Presidential Campaign of 1860.* Pp. xiii, 356. Price, \$2.00. New York: Macmillan Company, 1911.

This book deals with the most important Presidential campaign ever waged in this country. In a way our entire history was in preparation for it. Consequently to understand it one must read our history, certainly from 1776 up to that time. But one cannot compress all this into a brief volume and then give the history of the campaign proper. Professor Fite had one of two courses open to him, either to give a bare synopsis so meager in

details as to be practically valueless or to fix upon some nearby period and give details full of great significance. He wisely chose the latter and started in with a reasonably full account of the John Brown episode and its influence on public feeling. This is followed up by a summary of Helper's "Impending Crisis," with a description of the contest for speaker which it precipitated and the consequent discussion of slavery in and out of congress. Considerable space is devoted to the last named subject and the treatment is not confined to the campaign year. The friction over the rendition of fugitive slaves and the enforcement of the personal liberty laws, the agitation over the slave trade, the treatment of free negroes both in the North and South, and the discord in the churches are properly discussed as necessary for an understanding of the popular mind in 1860. A chapter is devoted to the national conventions of each party. The author does not accept the theory that the rupture at Charleston was the result of a conspiracy whose ultimate object was to destroy the Union. A long chapter is devoted to the campaign arguments, which center around slavery, but which also include the corruption of the administration, expansion (for slavery extension), the supreme court (slavery), popular sovereignty (slavery), disunion (slavery), the tariff, internal improvement, the Pacific railroad, the Pacific telegraph and the homestead act, the last of which had been vetoed by Buchanan. A closing chapter describes the conduct of the campaign. An appendix of one hundred pages gives the party platforms and the campaign speeches made by Schurz, Douglas, Yancey, and Brownlow.

In this book Professor Fite displays a pretty thorough mastery of his subject and has produced a volume that will be of great value to students of history. The reviewer has only one serious criticism to make, that the author has failed to add a chapter giving detailed analysis of the results of the election. It is not enough simply to give results by states. The county returns throughout the entire South and the Northwest will repay a careful study.

The following sounds strange in 1911 to the son of a slave holder: "Both sides were right! Neither could have given in and remained true to itself. The North was right in opposing slavery, the South was right in seceding from the Union in its defense." But it was preceded by this: "They [the South] believed that slavery was right. . . . With this assumption in their minds, no other course than secession from the Union for the protection of their vast property was possible." On the same principle the secession of the railroad and trust magnates would be justifiable to-day.

DAVID Y. THOMAS.

University of Arkansas.

Haney, Lewis H. *History of Economic Thought*. Pp. xviii, 567. Price, \$2.00. New York: Macmillan Company, 1911.

There has been great need for a comprehensive history of economic thought in English. The writer has ventured to cover the entire field, his aim being "to present a critical account of the whole development of economic thought

in the leading nations of the Occidental world." The book is designed to serve as a text-book for advanced students. The author has applied a two-fold test to decide the relative space accorded to the various economists: (1) Discovery or development of points of theory; (2) influence on contemporaries and followers. In the light of these facts the book must be judged. One-sixth of the book is covered before the reader arrives at the beginning of a science of economics. In contrast with this he finds that only one brief chapter is devoted to "Recent Economic Thought in the United States." It would seem that the fragments gathered from social philosophy, the ethical and religious systems of the ancients and of the Middle Ages might have been condensed into briefer compass if that plan would have left more space to be devoted to modern theories. What this criticism really means, perhaps, is that another volume is necessary in order to offer an adequate treatment of modern theories. The author begins the discussion of the evolution of economics as a science by calling attention to some of the changes in social philosophy and by a review of the system of the physiocrats, with which Adam Smith was very familiar. He then devotes ample space to a presentation of the chief doctrines of the Classical School, beginning with those of Adam Smith and including the contributions of Malthus, Ricardo, Carey, Bastiat, Mill and Senior. The author's next task was to present the growing opposition to the Classical System and the lines of criticism which introduced the modern thinking in political economy. Emphasis began to be placed more upon income and consumption, and less upon wealth and production. Socialism emphasized better distribution and economic justice. Social reformers sought to remedy existing evils. The theory of evolution was bringing old abstract theories to the test of everyday, changing facts and relations. The economists themselves were reconstructing their own theories. In the midst of all these influences new schools of economic thought were developed. To these the author turns his attention very briefly. Jevons and the marginal utility concept, the Austrian School and subjective value theories, and recent thought in the leading countries of Europe are rapidly passed in review, after which in still briefer scope recent thought and its background in the United States are outlined, with mention of the most prominent doctrines and men.

ROBERT EMMET CHADDOCK.

Columbia University.

Hobson, J. A. *The Crisis of Liberalism: New Issues of Democracy*. Pp. xiv, 284. Price, 6s. London: P. S. King & Son.

The author signed the preface to this valuable scientific treatment of contemporary political, economic and social problems, just two years ago (December 1, 1909). Although much has happened in the meantime to change the present status of these fundamental problems,—especially as seen in the victories of Liberalism in Great Britain, the advance of progressive legislation in this country, and similar movements elsewhere,—the book referred to in this title is well worth reading by all who are interested in

present-day affairs, and merits re-reading by all actively engaged in the struggle for advancement.

The first third of the book is devoted to the political struggle. The Lords' veto in England holds the center of the stage. Special emphasis is placed upon this thesis: "The destruction of the veto must be accompanied or followed by other important reforms in our electoral institutions and by a measure which shall associate the people more directly with the art of government, by assigning to it that power of mandate which the Lords falsely pretend that it possesses."

Social and economic reforms are essential, but these cannot be secured without perfecting the constitutional machinery of democracy—without removing the obstructions in electoral and legislative institutions. But he insists that "There can be no more foolish error than to represent the veto of the House of Lords as the only, or even the chief barrier to the free realization of the will of the people in this country."

Many defects in constitutional machinery are pointed to and the injustices are numbered. Cabinet control and the caucus system come in for their share of attention. These must be reformed but a constructive plan covering the whole field must be evolved. The most important changes are as follows:

"The House of Commons must be made more accurately representative, and representative government must be supplemented by a measure of direct democratic control."

"In order to make the House of Commons representative of the will of the people it must be in direct and frequent contact with the needs, aspirations and experience of the whole people."

"Adult suffrage is the only practicable expedient for securing the required contact between representatives and people."

"With the same object of rendering the House of Commons a truer expression of the popular will, some form of proportional representation must be incorporated in our electoral system."

In addition to the above the author advocates "the destruction of the present plural vote" as an important change and "the payment of members and electoral expenses out of public funds."

The one additional reform to which much attention is given is the demand for referendum; "the only effective check upon these defects or abuses of representative government is a direct appeal to the people."

The author devotes a very considerable part of the book to a discussion of Liberalism contrasted with Socialism and treats a list of the problems of Applied Democracy.

JOHN LEE COULTER.

Washington, D. C.

Humphreys, John H. *Proportional Representation*. Pp. xxi, 431. Price, 5s. London: Methuen & Co., Ltd., 1911.

John H. Humphreys, the intelligent and enthusiastic secretary of the Proportional Representation Society of England, who went to South Africa to

introduce proportional representation there, has published, through Methuen & Co., a thoughtful and comprehensive study of methods of election under the title, "Proportional Representation." Although written by a strong partisan and advocate, and, although, as Lord Courtney, of Penrith, in his introduction says "the author has no doubt about his conclusions" nevertheless he goes fairly and with quite sufficient fullness through the main branches of the controversy over proportional representation. Moreover, his descriptions of the second ballot and the transferable vote, the single transferable vote, the lists systems and the various national adaptations in Japan, Sweden, Germany, Finland and elsewhere are adequate. Without commenting in this connection on the workability and adaptability of the plan, it must be pointed out that this is a sane, forceful, careful study of it and worthy of the thoughtful attention of American publicists. The movement for proportional representation bulks larger in Great Britain than in this country, having reached the standing and dignity of consideration at the hands of a royal commission. Its report made last spring was a sort of Scotch verdict. It declared that it was unable to report that a case had been made out for an application of proportional representation "here and now."

CLINTON ROGERS WOODRUFF.

Philadelphia.

Kirkman, M. M. *Science of Railroads*. Seventeen volumes. Pp. xxx, 8872. Price, \$36.00. Chicago: Copley Phillips Company, 1907-1911.

The well-known series of books upon railways, written from time to time by Marshall M. Kirkman, have, during the past four years, been put into final form. They are now published in seventeen volumes under the title, "The Science of Railways." The titles of the volumes are as follows: "Air Brake Construction and Working," "Safeguarding Railway Expenditures," "Locomotive Appliances," "Collection of Revenue," "Freight Traffic and Accounts," "Passenger Traffic and Accounts," "Operating Trains," "Building and Repairing Railways," "The Locomotive and Motive Power Department," "Railway Rates and Government Ownership," "Organizing the Railways; Financing, General Accounts and Cash," "Engineers' and Firemen's Hand Book," "Shop and Shop Practice" (2 vols), "Cars—Construction, Handling and Supervision," and "Electricity Applied to Railways."

Most of the books were written originally by Mr. Kirkman and presumably have been revised by him from time to time. In the publication of the later and more technical works, however, Mr. Kirkman has had the assistance of experts. In the preparation of the volume upon "Cars," for instance, the author received the "advice, assistance and co-operation" of Mr. W. H. Dunham, a mechanical engineer and expert in the construction and handling of railway cars. This volume appeared in 1909. Likewise, in writing the book upon "Electricity Applied to Railways," which was issued in 1910, Mr. Kirkman was assisted by Mr. Charles F. Scott, "an honored

member of the American Institute of Electrical Engineers, and the electrician in chief of one of the few great electric manufacturing industries of the world." Similarly, in writing the volume upon "Shops and Shop Practice," Mr. Kirkman was aided by Mr. Robert Quayle in "the description of shops and roundhouses and the care and repairs of locomotives and cars," while Mr. A. H. Barnhart prepared the part relating to practical machine work. Mr. Kirkman has thus become rather the editor than the author of the later volumes of his series.

The seventeen volumes as a whole contain much practical information clearly presented. Each revision has improved the volumes, and the later works prepared by technical experts and edited by Mr. Kirkman have appreciably raised the average value of the series as a whole. The publishers are to be congratulated upon the attractive appearance of the series.

EMORY R. JOHNSON.

Lombroso, C. *Crime: Its Causes and Remedies.* Pp. ix, 471. Price, \$4.75. Boston: Little, Brown & Co., 1911.

This book is the third in the series of foreign publications selected for translation by the American Institute of Criminal Law and Criminology. The translation was made by Rev. Henry P. Horton, of Columbia, Mo.

This volume, together with the recently published summary of Lombroso's "Criminal Man," by his daughter, Mrs. Gina Ferrero, provides the English reader with a somewhat adequate source of first hand material for the study of the theories of this greatest representative of the Italian School of Criminology. It was a matter of great satisfaction to Lombroso, who died in October, 1909, that these volumes were to be given to the English world.

It is but natural that the storm center of criticism of Lombroso's work should have been in the field of his atavistic and specific anthropologic theories of crime. These ideas were new and revolutionary. To those who have been familiar with these theories only because of the controversies they have aroused, the book will be a revelation of Lombroso's breadth of view and comprehensiveness of treatment.

If in other writings he has dwelt upon the anthropologic factors, and these have been emphasized perhaps unduly, especially by his disciples and contemporaries, in this volume he lays stress upon the economic and social causes which have produced the criminal type—the environment favorable to the development of the criminal man. In Part I, the Aetiology of Crime, climate, topography, race, civilization, immigration, density, alcoholism, education, religion, politics, law, newspapers, etc., are treated elaborately to show their bearing upon the amount and character of crime. In all, 243 pages, or more than half the book, we find devoted to this study.

Part II is devoted to the Prophylaxis and Therapeutics of Crime. Here again we discover that many critics of Lombroso's theories of penology have lacked sufficient data for accurate generalizations. In order to treat the criminal on the basis of his criminality rather than his crime, which has

been the plea of the scientific school in protest against the old classical school, we must go much farther than the mere genealogy and anthropometry of the criminal. His social environment must be considered and preventive and reformative measures adopted. Two chapters in this part are devoted to penal institutions and criminal procedure.

Part III deals with Synthesis and Application. In striking contrast to the pessimism of certain writers who have adopted Lombroso's theories of the "criminal type" and have deduced conclusions unfavorable to the idea of reform, is Lombroso's deduction in the chapter on practical proofs of the utility of reforms. Born criminals, to be sure, are not susceptible to preventive or reformative measures, but statistics are given to show how the volume of crime in general has been reduced by sane methods of treatment.

The book ends with an interesting chapter on Symbiosis or the Utilization of Crime. Here even the born criminals, "against whom all social cures break as against a rock," may be transformed into useful members of society by utilizing them in "occupations suited to their atavistic tendencies."

No library of criminology is representative or adequate that does not contain this volume.

J. P. LICHTENBERGER.

University of Pennsylvania.

Mallock, W. H. *The Nation as a Business Firm*. Pp. xi, 268. Price, \$1.00. New York: Macmillan Company, 1910.

It would be difficult to find a more valiant and persistent defender of the present social and industrial system than Mr. W. H. Mallock. When he is not delivering speeches against reformers, socialists and single taxers, he is writing books and monographs in an effort to combat their propaganda.

In his lately published work, "The Nation as a Business Firm," he has attempted a lengthy and involved analysis of family incomes in Great Britain by means of which he claims to show that, "contrary to the doctrine of Marx, the 'poor', instead of growing poorer, are constantly growing richer, and that instead of their wealth being progressively swallowed up by the employers, the wealth of the employers is progressively swallowed up by them." His data have been gathered chiefly from the income tax statistics and from the writings of Giffen, Levi, Money, Bowley and Primrose.

Granting that Mr. Mallock has been able to substantiate his contention that the condition of the poor has steadily improved, a substantiation which in this instance is rather doubtful because of his use of questionable statistical methods, his acknowledgment of the existence of 350,000 families with an average annual income of about £30 and of 1,200,000 families with an average annual income of about £71 certainly discloses a most unsatisfactory state of affairs. If the author could but realize the misery and destitution which this represents he would, no doubt, be more sympathetically inclined toward those who are trying by various means to better the condition of the poorer classes.

Mr. Mallock seems to have expected that criticism would be directed against his statistical methods, for he acknowledges that "for many figures

in this volume 'guesses' is the right word." A better arrangement and a clearer presentation of the data would have made the book more readable than it now is. The author appears to have overlooked the fact that an analysis of family incomes without an accompanying discussion of prices, family budgets, etc., is of no great value in deciding any question regarding the welfare of a people.

IRA B. CROSS.

Stanford University.

Mitchell, C. A. *Science and the Criminal*. Pp. xiv, 240. Price, \$2.50. Boston: Little, Brown & Co., 1911.

Devon, James. *The Criminal and the Community*. Pp. xxi, 348. Price, \$1.75. New York: John Lane Company, 1912.

The almost simultaneous appearance of these two volumes from contemporary English authors serves to reveal the extent of the new interest in criminality which for so many years has been rather the concern of continental writers.

The former is a contribution to the literature dealing with the general subject of criminal procedure. Its specific field is that of the detection and identification of criminals. The author advocates the employment of expert detectives immediately upon the discovery of serious crimes and not after the first traces are obscured by the untrained policeman. The chief methods of identification discussed are the use of photographs, anthropometry and dactyloscopy, the last mentioned being especially valuable in the case of violence. Several pages of finger prints are given as illustrations. The larger part of the book is devoted to the detection of forgery. Here he discusses the work of handwriting experts, the use of the microscope and chemical ink tests in detecting alterations, the examination of charred fragments, the forgery of bank notes, etc. He does not regard the identification of criminals by means of handwriting as very satisfactory, citing numerous instances where discrepancies have occurred. His discussion of heredity and handwriting hardly carries conviction to the mind of the reader and the illustrations offered seem rather to disprove than to prove his theory. Chapters are also devoted to the "Identification of Human Blood and Hair" and "Adulteration of Food."

The general method used throughout the book is to present the material in concrete form through the description of numerous trials of criminals and many notable trials are discussed with criticisms upon both positive expert testimony and circumstantial evidence. This method adds to the readableness of the volume, but scarcely enhances its value as a scientific treatise. As might be expected from a Scotland Yard official, the illustrations are all from English sources. It is, nevertheless, of great value to the American student and should be in every library of criminology.

The latter volume deals more particularly with the material of criminology and penology. Only one chapter is devoted to procedure. It is original and matter of fact, and abounds in practical observations that

are of immense value. It is to be regretted, however, that the author should feel an antagonism, which he expresses often in language bordering on satire, against the scientific work of criminologists, which he does not seem adequately to comprehend. This attitude is particularly manifest in the first chapter on The Criminal and the Criminologists, while the second chapter on Heredity and Crime, reveals a lack of biological training on the part of the writer which disqualifies him largely for making valuable criticisms in this field. The lack of English investigation in scientific criminology is not compensated for by flings at continental theorists. That there is much to be criticised in the claims of the positive school no one will question, but arguments are best answered by arguments and little is gained in the way of clearness by mere references to them as "pseudo-scientific jargon."

The positive discussions contained in Parts II and III, on Common Causes in the Causation of Crime and the Treatment of Criminals, are enlightening and extremely valuable and here the author finds himself most at home and for which his training as medical officer in the prison at Glasgow for many years has best qualified him. We cannot agree with Professor Murison in his introduction that "the book is most illuminating and the wisest that has ever been written on the subject," but it is a book to be read by every student of the science,—one in which much valuable information has been packed, and one which will prove a mental stimulant even if one does not agree with all his conclusions.

J. P. LICHTENBERGER.

University of Pennsylvania.

Morgan, S. A. *The History of Parliamentary Taxation in England.* Pp. xvii, 317. Price, \$2.00. New York: Moffat, Yard & Co., 1911.

When David A. Wells established the prizes, one of which has been awarded to this essay, he laid down six "thou shalt not" commandments, in the following language: "No subject shall be selected for competitive writing or investigation and no essay shall be considered which in any way advocates or defends the spoliation of property under form or process of law; or the restriction of Commerce in times of peace by Legislation, except for moral or sanitary purposes; or the enactment of usury laws; or the impairment of contracts by the debasement of coin; or the issue and use by Government of irredeemable notes or promises to pay intended to be used as currency and as a substitute for money; or which defends the endowment of such 'paper,' 'notes' and 'promises to pay' with the legal tender quality." Although these provisions of the founder's will suggest a desire to establish an entail in certain economic views, yet it is clear that if essays like this are not in contravention of the rules the entail is not dangerous.

Of these essays Professor Theodore Clarke Smith in a preface to the present volume says: "Since it," (the competition), "is confined to students and graduates" (of not more than three years' standing) "of a college which offers no post-graduate instruction, it is not intended to require original

research, but rather to encourage a thoughtful handling of problems in political science." The result in this case is a great relief from the "dry-as-dust" demonstration of indefatigable research which a doctor's thesis too often becomes. Without being in any sense puerile, the style of the essay is lively and the book will be found to be very readable, as well by those who are specially interested in its somewhat technical subject as by others. In fact there is a proneness to the selection of the more picturesque material and an occasional choice of language that leads one to suspect that the guiding hand of the late Professor Henry Loomis Nelson, under whose instruction the essay was begun and of Professor Smith the final editor, may have been needed occasionally to suppress the exuberance of youth. That the leash slipped occasionally will be shown by the following passage from page 211: "... the woeful struggle of Henry, bleached-out in mind, a dependent upon the efforts of a woman against the rising power of York; . . ." Still, making an essay of this sort more readable by such means is a pardonable fault if not an added grace. The only sense in which it is at fault is that in giving so much space to events in English history, which it might be assumed the reader would know, it curtails the space available for a fuller discussion of the special topic in hand.

It is not a gracious task for the reviewer to act as proof-reader on a finished book, yet the separation of the subject from the verb by a comma on page 68 and again at the bottom of page 94, and a sentence without expressed subject or verb, on page 135, as well as the rather too frequent omission of little words like "the" and the conjunctives, in an effort at sprightliness in style, are among the slips noted.

The essay gives in a clear and logical manner the main events in the development of the power of parliament over taxation from the first clear hint of the curbing of the power of the king in the twelfth and fourteenth chapters of the Magna Carta to the Bill of Rights of 1689. Of the latter the essayist says, on page 306: "In the matter of taxation, it sums up in a few clauses the whole principle which had been in course of evolution since the German chieftains received gifts of cattle and fruits from their people." With this the essay closes.

CARL C. PLEHN.

University of California.

Paterson, A. *Across the Bridges*. Pp. xiv, 273. Price, \$1.70. New York: Longmans, Green & Co., 1911.

Nothing can be of richer interest than an insight into the multifarious vicissitudes of human life. In terse English, clever style and with unusual directness the author of this book tells us what he saw "Across the Bridges" and speaks of the life, hopes, trials and ambitions of the endless poor of East London. Embellishment with incidents, color and illustration, all add to the power and vitality of the story.

There is a brief but vivid account of the streets, homes and external environment of the poor. Then follow two chapters on their life and habits,

including a discussion of the early marriages, increasing extravagance and peculiar customs. One-half of the book is devoted to the problems of the youth. Pitiable indeed is the prospect for the newly-born babe. The child is taken through the elementary school with its handicaps and advantages and we see the physical and intellectual influences that emotionally play upon him. Again we see him out of school engaged in his various pastimes. Perhaps he enjoys a day's outing in the country—an experience of doubtful value according to the author. The picture of the boy at work, his lack of skill and the bitter problem of unemployment give much food for thought, but the sports and recreation enjoyed by the working boys offer some relief from this dismal scene. Morals and the religious life are better understood when we learn of the associations and traditions. Some noteworthy observations are made on the juvenile offender and a brief account is given of his disposition before the courts and his subsequent treatment.

The pathetic relation of the age of parents and size of family to the curves of prosperity and adversity and the serious outlook of the workingmen are briefly pictured as well as the grim consequences in blighted love and disrupted family relations. Many poor lose all hope and are precipitated into the lowest stratum of human wreckage.

Finally, no one can understand the problems of the poor, their habits, customs and extravagances without much personal contact with them. There is need of knowledge. Gained in this way it provokes sympathy and helpfulness. Without these qualities intelligent social action is not possible.

GEORGE B. MANGOLD.

School of Social Economy, St. Louis.

Pennington, A. Stuart. *The Argentine Republic*. Pp. 352. Price, \$3.00.
New York: F. A. Stokes Company, 1910.

Many books have been written about Argentine, but few have succeeded in giving as comprehensive a view of the country as is afforded in this volume. It is in effect a handbook of information on all important subjects, yet presented in readable form. The items covered include physical features, population, government, history, flora, fauna, geology, industries and products, literature, politics and the life in Argentine.

The history of the country is given more space than any other topic, covering about one-fourth of the book. Its discussion is taken up in four periods, that of the Adelantados, the colonial, the viceroys and the republic. These chapters, together with the one on population, give a good background for an understanding of the present development of the country as it has been influenced by physical features and resources.

The average reader is likely to feel that the discussion of flora and fauna is largely a waste of space, which might much better have been devoted to a more extensive discussion of Argentine resources, industrial and commercial possibilities. About three times as much space is devoted to the former topics, while many pages in both chapters on flora and fauna are devoted simply to a cataloguing of varieties. For example, few persons

will care to know that there are fourteen species of railbirds in Argentine, or will have use for the genus and species of the principal representatives of the group. This defect is the one serious criticism to be directed against the book.

One of the best chapters is the concluding survey of life in Argentine, where the author presents such items as the feelings of a newcomer, salaries, temptations, cost of living, customs and the like. In few words the contrast between European conditions and those in Argentine is clearly drawn, and suggests for the prospective visitor various ways in which unpleasant situations may be avoided.

Extracts from the constitution, especially regarding foreign trade; a glossary of native idioms, many of which are met in the text, and a good map of the country are useful additions to the volume.

WALTER S. TOWER.

University of Chicago.

Persons, C. E., Parton, Mabel, and Moses, Mabelle. *Labor Laws and Their Enforcement.* Pp. xxii, 419. New York: Longmans, Green & Co., 1911.

The first chapter of this painstaking volume, a work concerned mainly with Massachusetts, gives a history of factory legislation in that state from 1825 to 1874,—at which point Miss Sarah Whittelsey's earlier work, not included in the volume, takes up the narrative and carries it to 1900. As the net result of this fifty-year period, an approximate ten hour work-day and sixty hour work-week were secured for women and children, and the beginning was made of the use of a school attendance certificate as a prerequisite for the employment of children under fourteen. This study by Mr. Persons is exhaustive and interesting, but is allowed disproportionate space—nearly one-third.

The next chapter describes the still unregulated conditions in women's work, and is based on the personal experience of the writers as employees in various manufactories and restaurants. Women workers were found exposed to many sources of ill health: dust, gases, wet floors, defective sanitation, irregular hours, night work. Practical remedies for these dangers are suggested.

Chapters III and IV point out the weaknesses in the administration of Massachusetts labor statutes. Summarized, these defects are: inadequate force of inspectors, with faulty system of records and reports; responsibility as to inspection divided between district police and state board of health; few prosecutions and small fines. However, three advance steps are recorded for the year 1910: first, protection of newsboys and other street traders; second, physical examination and certification of every child who seeks employment; third, exclusion of minors from occupations declared dangerous by the state board of health. A helpful chart gives a comparative study of enforcement legislation throughout the United States.

Chapter V is a digest of recent labor legislation in Massachusetts (1902-

1910), affecting even the employment contract, wage payment, and employers' liability.

The last chapter discusses the regulation of private employment agencies in the United States and the pessimistic conclusion is reached that Uncle Sam is far behind on all the requisites of a good law. Three charts show comparative legislation on this important subject.

Interesting and valuable as the several studies are, one regrets that they were not condensed and combined, if possible, with Miss Whittelsey's earlier study so as to give a comprehensive survey, historical and critical, of labor legislation and administration in Massachusetts. Such a volume is much needed, and this would have afforded the opportunity to write it.

J. LYNN BARNARD.

Philadelphia School of Pedagogy.

Phillipson, Coleman. *The International Law and Custom of Ancient Greece and Rome*. Two vols. Pp. xl, 840. Price, \$6.50. New York: Macmillan Company, 1911.

Our text-books teach us that there was no international law properly so called recognized by the ancient nations. Foreign policy there was and each state observed ill-defined usages, but obligation of states there was none, at least none between states of different race. Religion rather than international law was the influence which worked for observance of interstate compacts. Greece was a group of city states and Rome acknowledged no equality of other states—which is the prerequisite of real international law. The most that can be claimed is that in the ancient societies there was a large number of customs which time was to see appropriated and adapted to serve the purposes of the community of states when it was later to make its appearance.

Mr. Phillipson would have us dismiss these beliefs. He insists there is an ancient international law, truly juridical in character which has been overlooked by previous writers and to a large extent inaccessible until in recent years historic research placed a mass of new materials at the disposal of the student. His two large volumes show exhaustive search of the materials. He has used the literature of Greece and Rome to corroborate the practice he finds described in historical material. The customs of Greece and Rome are subject to constant comparison to show the extent to which each accepted the principles under discussion.

After the introductory chapters discussing the extent to which the Greeks and Romans recognized an international law, the burden of the first volume is the relation of these two states to foreigners, especially the rights granted the domiciled alien, the naturalization of foreigners, the conflict of personal and territorial law principles and the right of asylum. The last chapter in the first and the entire second volume deal with public international law exclusively. Treaties, negotiations, embassies, balance of power, arbitration, war and maritime law are treated with great detail.

No one who reads these volumes can fail to recognize that they show accepted practices among the ancients which approach much nearer to what

we now call international law than is generally recognized. The discussion of embassies and war rules and arbitration is especially valuable on this account and will necessitate the revision of many of the sweeping statements of our texts. But on the whole in spite of Mr. Phillipson's array of facts the statement that the ancients had no true international law does not seem to be upset. One cannot escape the feeling that at many points the author's enthusiasm leads him too far. The war-rules he discusses, for example, though they approach the standard of later practice, are rules which the Roman would not have been willing to admit were binding upon him by any code of rules applying to states.

One feels that the argument would be stronger if the line were drawn more closely between the references to history and the references to literature. The combat of Paris and Menelaus and the refusal of Ilus to give Odysseus poison for his arrows can scarcely be relied upon as evidence or illustrations of a generally accepted standard of international relations.

The author's painstaking search for material has led him through Greek, Latin, French, Italian and German authors. The numerous quotations in the text are as a rule either given in translation or in the original followed by an English translation. To have adopted the same plan for all quotations including those in the footnotes would have made the discussion more available to many of those who will be interested in these volumes.

Mr. Phillipson's book is in a field new to English authors. His general thesis is well maintained—the ancients did have customs applying to international relations to a much greater degree than we have been wont to recognize, but whether these usages are settled and general to an extent that would justify calling them real international law, many readers will still doubt.

CHESTER LLOYD JONES,

University of Wisconsin.

Richman, I. B. *California under Spain and Mexico, 1535-1847*. Pp. xvi, 541. Price, \$4.00. Boston: Houghton, Mifflin Company, 1911.

The student of American history should feel greatly indebted to Mr. Richman for this book. Nowhere can the history of California be found so well told, in compact form, as here. The book indicates conscientious labor on the part of the author in preparing for his work; skill in condensing so much valuable information into small compass; and enthusiasm in telling the interesting story. The make-up of the book is pleasing, the maps, charts and plans are excellent. The translation of such documents as the "Galvez Report" and the "Fages Journal," the numerous quotations from sources in the text and in the notes should be appreciated by students.

The book has the merit of freshness because of the amount of new material used in its preparation. The author has written his book at a time when he has been able to avail himself of recently found documents and new monographs along special lines. This enables him to make more definite and complete statements on controverted points than was possible in previous works on the subject. The book rests so firmly on the source material that

its accuracy cannot be doubted and the author has been more than generous in the citation of authorities. The notes, moreover, make it possible for the student to go more into detail on special points and to find fuller discussion of controverted subjects, such as the attitude of England and of the United States to California before 1846.

The reader may derive from this book a good idea of the international competition which led to the discovery and settlement of California; of the system of administration of a Spanish colony and a Mexican dependency; of the mission and its relation to colonization; of the advent of the Americans and the final conquest of the country by them. The book contains many graphic descriptions of romantic incidents and of the conditions of life in early California. There are quite full characterizations of leading personalities including explorers, royal administrative officers, local officials, missionaries, fur traders and merchants.

Any adverse criticism would apply rather to the plan than the content of the book. The author undertook a somewhat difficult task in writing both for the general reader and the student. The amount of detail condensed into such small compass makes the book rather hard reading for one not already somewhat acquainted with the subject. California history is very interesting, and this book is a suitable one to open up the subject to a careful reader and student.

JAMES R. ROBERTSON,

Berea College.

Ross, Edward A. *The Changing Chinese.* Pp. xvi, 356. Price, \$2.40. New York: Century Company, 1911.

The student of race problems will welcome with enthusiasm this latest contribution to the literature of the subject. In view of the present revolutionary movement in China, nothing could be more opportune than a clear-sighted and scientific interpretation of Chinese characteristics. Professor Ross did not go to China for the purpose of gathering interesting material for a travelogue, but to obtain first-hand information for the verification or disproof of ideas concerning the Chinese which were the result of seven years' residence in California where the Oriental is best observed in America, and after many years of subsequent study of literary sources.

This volume is not primarily a description, though it abounds in descriptive material. It is an interpretation. It explains the Chinese. Superficial observers have attributed China's backward condition to its medieval government, to its antiquated industrial methods, to the static character of its people. Professor Ross assumes that these so-called causes are themselves results that need explanation quite as much as the effects which they have produced. The first chapter is a brilliant pen picture of the most obvious characters of the country and its people. "China is the European Middle Ages made visible—"a state of society . . . which will probably never recur on this planet."

The "Race Fibre" of the Chinese is due to natural selection under a bad

physical environment where the men of low physical resistance were eliminated. The "Race Mind" is not quite so clearly analyzed or explained. In the main its stagnation is not due to sluggishness but to prepossession by certain beliefs—beliefs that are tenaciously held because in a vast population they have been instruments of order, security and a goodly measure of happiness. When the isolation of these beliefs has been broken up the Chinese mind is quick to respond. There is no evidence of intellectual inferiority. No more thoroughgoing interpretation on the basis of the Malthusian doctrine can be found than Professor Ross' fourth chapter on *The Struggle for Existence in China*. China's social problems are the result of the pressure of population on space and on the means of subsistence.

The industrial future of China is ultimately hopeful because of the vast unexploited material resources, but because of jealousy of the foreigner, dearth of capital, ignorant labor, graft, nepotism and lust for immediate profits without regard for the future, the development will be slower than many have predicted. The chapters on *The Grapple with the Opium Evil*, *The Unbinding of the Women of China*, *Christianity in China*, and *The New Education* are illuminating discussions of the changes that are taking place with a rapidity undreamed of a decade or two ago. "There is no reason to believe that there is anything in the psychology or history or circumstances of the Chinese to cut them off from the general movement of world thought. Their destiny is that of the white race; that is, to share in and contribute to the progress of planetary culture."

As usual, Professor Ross' facetiousness of expression leads him occasionally into exaggeration, but this after all is scarcely a defect. It makes the book intensely fascinating reading, and, once begun, the reader is loath to lay it down until he has reached the last page.

Whether or not all the generalizations of the author will be substantiated by more intensive observation and future history is of less importance than the contribution he has made to race interpretation on a scientific sociological basis.

J. P. LICHTENBERGER.

University of Pennsylvania.

Spencer, F. H. *Municipal Origins*. Pp. xi, 333. Price 10/6. London: Constable & Co., Limited, 1911.

This important contribution to the history of local government describes the process by which the existing municipal institutions came to be established in England. The industrial revolution rapidly developed urban communities in what had been mainly a rural country and made it necessary to devise new machinery in the place of the inadequate manorial courts, parish vestries, old municipal corporations and quarter sessions. Fundamental changes were made; so fundamental indeed that the modern system "is not a growth: it is a creation." Mr. Spencer has made a systematic study of these changes as they appear in the great mass of private bill legislation of the eighteenth century and the early part of the nineteenth. He describes

the procedure followed in securing such legislation, the structure of the new governing bodies and the powers and duties with which they were invested. The conflicts between the reformers and the adherents of the old order are recounted with graphic detail. When it was proposed to abolish the office of overseer of the poor a churchwarden of Woolwich cried out indignantly: "Such speculative reformations are too closely allied to revolutions; and we deprecate every idea which can in any way tend unnecessarily to deface the wise structure erected by antiquity." There is ample proof, however, that the reforms were anything but speculative; they were adopted without relation to any general scheme and by what Mr. Spencer calls "the truly English method," "the wise and sufficient, if insular, method." Each community looked only to its own immediate experience and petitioned parliament for the satisfaction of its particular needs. The system of municipal government grew up naturally in response to the new social conditions; and, as Sir Edward Clarke remarks in his preface to the book, "the later developments, intended to give it scientific completeness, are in some respects the least satisfactory of all its parts." Mr. Spencer collected the material for his book while assisting the Webbs in the preparation of their history of local government; not only has great industry been expended upon the work of investigation, but considering the complexity of the subject its orderly and lucid presentation should be commended. There has been some carelessness in reading proof; on page 311 two sentences are unintelligible.

E. M. SALT.

Columbia University.

Tarbell, Ida M. *The Tariff in Our Times*. Pp. ix, 375. Price, \$1.50. New York: Macmillan Company, 1911.

In this book, consisting largely of material previously published in the *American Magazine*, Miss Tarbell traces the history of our tariff since 1860. The narrative is entertainingly written in popular style and throws new light upon the political bickerings and log-rollings by means of which the duties have been made more and more protective; but there are no contributions of importance to the theory of the tariff or its practical economic effects. The main purpose is to expose the dominating principle of granting favors to constituents and campaign contributors regardless of the interests of consumers. The chief factor in determining the rate of duty imposed upon any article has been the organized strength of the producers. The attitude taken by the author is one of severe condemnation of the legislative methods of the protectionists.

The falsity of the pauper labor argument is rehearsed; the fact that the tariff is a tax is emphasized; and the benefits to the trusts are again pointed out. Throughout, however, a strong bias is manifested. It seems unwarranted, for example, to drag in the United Shoe Machinery Company as a possible beneficiary of the tariff. Similarly, the statement (page 355) that the earnings of the cotton mills have been "tremendous" is unjustified; a

few have paid high dividends but the average has not been extraordinary. Again, too much emphasis is placed on the McKinley Act and its successors (page 288) in causing the substitution of cotton for wool, a change which progressed more rapidly before 1890 than after. Finally, in view of the apparent desire to discredit all protectionists, it is to be regretted that the vivid portrayals of personalities prominent in tariff manipulations, oftentimes in none too complimentary terms, have not been substantiated by references to the sources of information. The entire absence of footnotes seriously detracts from the scientific worth of the book.

The statement (page 329) that the tariff is "the most serious matter since the days of slavery" will not be universally accepted. On the contrary, there are good grounds for asserting that the tariff does not deserve the importance frequently attributed to it by supporters or opponents. The author's conclusion, however, that the most injurious effect of our tariff system has been, not the hardship to the poor nor the injustice to consumers in general, but the contamination of public morals by reason of the commercialism developed in Congress, deserves thoughtful consideration.

MELVIN T. COPELAND.

New York University.

Yen, H. L. *A Survey of Constitutional Development in China.* Pp. 136.
New York: Longmans, Green & Co., 1911.

This work is a scholarly treatise on the development of political ideas in China. It should have especial value to those students of political science and sociology who are anxious to know something about the evolution of Chinese political institutions and the principal basis of the Chinese political system. But for a person who desires to get a glimpse of the contemporary political situation in that far eastern country this monograph cannot be much relied upon, for it almost entirely deals with Chinese political philosophy. "Political Philosophy," the title of the first chapter is in fact the key to the book. This chapter, as the name indicates, is a systematic review of the political theories propounded by the leading philosophers of Cathay two thousand years ago. The second chapter deals with feudalism which was the prevailing form of government before and at the time of Confucius. This was in fact the political environment of Confucius, and the Confucian classics practically constitute the only reliable authority for the description of this political system. The third chapter bears the name of public law, but has reference to the Confucian moral code so far as it may be applied politically. This entire chapter is, therefore, a description of nothing but the political philosophy of Confucius. The fourth chapter is a very short one, dealing with the political situation after the time of Confucius. Only the last chapter comes down to modern times and deals with the movement for a constitution.

The main criticism of the work that can be made is that it should not bear the title, "A Survey of Constitutional Development in China." A far more appropriate title would be "The Political Philosophy of Confucius."

Moreover, the word "constitutional" in the present title is rather misleading. No Occidental reader will stretch his imagination so far as to consider the Confucian classics as the Chinese constitution.

CHINSON YOUNG

Peking, China.

Yule, G. Udny. *An Introduction to the Theory of Statistics*. Pp. xiii, 376. Price, \$3.50. Philadelphia: J. B. Lippincott Company, 1911.

The book is based upon the course of lectures given by the author during his tenure of the Newmarch Lectureship in Statistics at University College, London. As he explains in the preface, the material has been increased and a greater variety of illustrations has been introduced in order to render the work useful to other scientists "besides those interested in economic and vital statistics." This is a distinct service, because all careful scientific work to-day, in whatever field, places the greatest stress upon method, and this book represents the latest attempt to work out in logical order and related development the methods available for the discussion of statistical data upon which, as never before, our reasoning is being based in all the fields of scientific endeavor. No effort is made to cover the methods of collecting data or the history of statistics, although at the conclusion of the introductory chapter a number of references are cited for the use of the student who wishes more complete information on the history of the science. This plan of references at the end of each chapter enables the student to follow particular discussions in greater detail, and the exercises provided for each topic discussed, although frequently too difficult for the beginner in the science, furnish to the earnest student a means of testing his real understanding of the principles and methods presented. It is to be noted that all readings and discussions in statistics must meet the test of their effectiveness in preparing the student or the investigator to think in quantitative terms; to be cautious and discriminating in the use of statistical data; to analyze, interpret, and present the bewildering mass of recorded data in accurate and intelligible terms; and, finally, to discern the existence of regularities, establish the interrelations between groups of phenomena, and to make clear the relations of cause and effect.

The book is divided into three parts. The first is devoted to a discussion of the theory of attributes, which brings the student at once into a comparatively unfamiliar field. We do not question the logical appropriateness of leading up to the more familiar part of the theory by this discussion of attributes which puts special emphasis upon the consistency of data and tests of association but it is reasonably certain that many readers, especially beginners, will find these chapters too difficult to offer an effective introduction to the science of statistics. The second part deals with the theory of variables. The basis of this discussion is laid in a very comprehensive treatment of the frequency-distribution in which the author shows by concrete data and actual curves the various forms of frequency-distribution. He readily passes to a discussion of the need for quantitative definition of the

characters of a frequency-distribution which leads him to explain the various form of averages, the measures of dispersion, the measures of asymmetry or skewness, and, finally, correlation. The exercises offer excellent material for practice. In Part III the author discusses in detail the theory of sampling. It may be admitted that this is a very important subject for theoretical discussion, but, since it involves a knowledge of higher mathematical processes, the difficulty is much greater on this account. If the author had been able to assume entire familiarity with these processes on the part of the reader, his task would have been easier and the results more satisfactory.

With the limitations mentioned in putting the book into the hands of beginners, it will prove of great value to those taking up the study of theory and method in statistics, and to the advanced student of the science it will offer most valuable material in directing and systematizing his work.

ROBERT EMMETT CHADDOCK.

Columbia University.

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PART ONE

The Rural Problem

CONDITIONS AND NEEDS OF COUNTRY LIFE

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There seems to be a consensus of opinion that there is something wrong with the country. Articles discussing the subject are myriad. Did the agricultural population view itself as urban writers appear to view it, it would doubtless consider itself as a fit subject for treatment at the old time "mourner's bench." That certain portions of our rural inhabitants are interested in the "improvement of rural matters" is evident from the appearance of discussions of some of those matters at various kinds of farmers' meetings. But that the agriculturalists view the situation with alarm is by no means evident. In order to help clear up the situation it may be well to attempt to determine just what is the rural problem. It may be well to show first what it is not.

I. Negative Aspects of the Problem

1. It would be a mistake to suppose that the problem consists in rural deterioration or arises because of rural degeneration. There has taken place in the United States no such thing as general rural deterioration. A slight acquaintance with the history of our country will afford ample evidence that there has been general advance almost all along the line in country life. As compared with pre-national times the farm population is better housed, better clothed, better fed, better educated and informed, is more productive, produces what it does produce more easily, has better implements and agencies with which to work, and the farm women have been emancipated from much of the arduous labor which fell to their lot in the period of household industry.

Indeed one does not have to recur to so remote a period as that to find striking contrasts. Many of our aged contemporaries who were reared on the farm well remember the backward conditions which obtained in matters of production, marketing, transportation, obtaining necessities of life in the home, methods of living, and education. Respect for truth impels us to recognize a great advance in the general conditions of life of country popu-

ations. It is well to remember that the "rural problem" is the product of intelligence, directed towards a province which has hitherto been somewhat remote from comparison and criticism. We have evolved certain ideals of life with the growth of cities and civilization, have brought them to bear on country life with the result that the latter has been found backward in some respects as measured by those ideals. The few instances of rural arrested development or of deterioration are a minimum in total country life as compared with the extensive slums of the cities.

2. It is also a mistake to assume, as is so frequently done, that the problem lies in the direction of rural depopulation. It is commonly taken for granted that the vast growth of urban centers has taken place at the almost entire expense of rural districts. There is a movement to the cities of rural populations. It may have its serious aspects. But it is not the problem preeminently. An analysis of the census reports and those of the Commissioner General of Immigration gives these results. City growth ensues from four factors, namely, incorporation, natural increase, migration from the country, and immigration. The first is inconsequential. Natural increase accounts for about 20 per cent of city increase, immigration, for from 65 to 70 per cent, and rural migration for the remainder, say from 10 to 15 per cent.¹

Much of the seeming loss of population to the cities arises as a result of movement of farmers away from their old locations to newer agricultural regions. Practically all of the older states have been heavy losers from this condition. Iowa lost population during the last decade because the value of land was high and farmers sold to others and purchased lands in the Dakotas and Canada, helping to raise the land values in those regions enormously.²

Nor must it be expected that the movement to cities which actually takes place is likely to be prevented in great measure. The forces at work in developing civilization and which must be considered basic and inevitable are largely accountable for the movement. The matter may be simply stated. One farmer produces sustenance for the support of many besides himself. Double his productive capacity and his produce supports double the original number. Carry this principle into operation generally and it will be seen that non-agricultural communities must be depended on to

¹ *American Journal of Sociology*, XVI, 648-661.

² *Ibid.*, pp. 651-54.

absorb the released populations. Hence cities must continue to make large advances in population as compared with the country.

3. Nor is the rural problem one of improving production chiefly, for the nation as a whole, although there are sections such as much of the South where improved agriculture must take place before other essential things may be added unto them. The motive of this statement is not one of minimizing the importance of inducing a more scientific and productive agriculture. The economic aspects of farming are exceedingly important. Increased production should mean an increased profit and this in turn should mean higher standards of living, better education of children, and improvement in the methods of living. Farmers no doubt get too little out of their soil. Much greater results might be secured also by placing agriculture on a business basis, by regarding it as a capitalistic enterprise and measuring its business success by the extent of profits. Organization of the various factors entering into the business so as to secure the combination which would yield the largest returns, and keeping a record of all phases of the business so as to have exact knowledge of cause and effect should prove advantageous. A more equitable marketing system by means of which the agricultural producers secure a larger share of the consumer's price than they do at present is desirable and constitutes a very considerable problem in itself.

While some portions of the nation are backward economically in agriculture it is not true as a whole even as compared with many other businesses. Our farmers are as progressive in their business as a class as are the mass of retail merchants, or as the mass of small factory men. Further there is nothing critical in the present method of agricultural production. We are faced by no famine. Our exportations of farm produce are still large and promise to continue so for some time to come. Farmers are not going into bankruptcy because of poor methods. They are prosperous as a class. Admit, as we must, that it would be far better if methods which did not pauperize the soil were employed, yet this is not the fundamental difficulty in farm life.

II. Positive Aspects of the Problem

1. The very center and essence of the rural problem is the necessity of securing the establishment of a new point of view, a wider

and more vital outlook on the part of the residents of the rural regions. At first consideration this may seem rather a bizarre statement of the problem, one that is remote from the pressing needs of those regions. But granting for a moment that the statement is valid let us recall in what the value of a point of view consists.

The fact of dynamogenesis emphasizes the truth that every idea seeks to realize itself in action, to get itself carried out by means of the physical organism. There is a tremendously significant relation between ideas and activities. Ideas, in the evolutionary sense, are not for playing mental checkers with but to direct activities and conduct. Philosophers may speculate about them or with them, but for the mass of mankind they are entertained in order to be put into execution. And the more powerful the ideas are the more true this is, that is the more immediate is the execution. The ideas which are bathed in a glow of feeling are the most executive. They carry themselves out most speedily.

Ideals of life and of action are among the more dynamic forms of ideas. They are the ones which appeal to men as the most desirable to actualize, are most longed for, have the largest element of feeling. But an ideal is only a point of view. An ideal as to a certain line of action expresses the individual's viewpoint relative to that section of human activities. My ideal for the farmer is expressed in the statement of my point of view for the farmer.

When talking of viewpoints we are speaking of the most fundamental factor in a given situation. A wholesome viewpoint makes a wholesome life. A changed viewpoint changes the life. Obtain the power to shape the point of view of the succeeding generation and you can lead it where you will. Hence, whatever is backward in country life is due to its outlook, and we can not hope for very great improvement until the outlook of rural inhabitants relative to the place and significance of farm life is transformed.

2. There are two vital points on which a new outlook must be developed among agriculturalists. If this can be secured all the other problems may be associated with it as incidents of attainment.

(a) One of these points is the matter of living. A new outlook on life, its meaning, its possibilities of enjoyment and satis-

faction, and as to the means which are fit to secure those ends is intensely needed. Life to the average farmer is devoid of the larger and more attractive elements. His life is a round of eating, working, sleeping, saving, economizing, living meagerly, recognizing only the bare necessities, skimping along with inconveniences, especially in the home, which is uncalled for considering his wealth. The wealthy farmer is one of the most helpless of men in the matter of finding satisfaction. This appears whenever he moves into the city to live. He still practices the stern economies, lives in houses without modern conveniences, keeps the old rag carpets, attends no theaters, goes to no lectures unless they are free, and acts as a man in a strange world or as one with a starved soul. The enjoyment side of life is lacking. His cultural and esthetic soul is in a state of suspended animation.

Such facts as these in the lives of the multitude of rich residents of rural districts make it apparent that the fundamental problem is not one of economics but of transforming farmers so that they look at life in a different manner. The appreciative qualities of life must be built up. They need to have developed the sentiment that the fullest and most successful life is the one which obtains the greatest number of satisfied wants in passing. Under this transformation the country will build good houses, comfortable in the modern sense, having the conveniences which lighten the lives of the indoor workers, and the equipment which renders the place sanitary and healthful. It will put in machinery everywhere possible to do the hard work, to reduce labor, to eliminate chores, as well as to make production more profitable. It will beautify the grounds, improve the roads for travel purposes, and look to nature as a source of inspiration.

(b) The other vital point is to secure a social outlook. The farmer has been burdened with an individualism which has been extreme and in a measure disastrous. Under the system of education under which he has been schooled it is perfectly natural that this should be so. The social side of life has never been opened to him. That he was a part of human society, that he worked under inexorable laws of markets and politics, that a community life may be made a means of satisfaction and training were not self-evident and axiomatic propositions. In fact he had no conception of such truths nor had his immature teachers in the "little

old red schoolhouse." His universe was bounded by physical nature in the shape of sunshine, rain and frost, and in a very small measure by his family and one or two neighbors. He and nature accounted for what he obtained. There were no human interlopers, save at critical times. There was no social accountability that was very persistent and apparent.

As a consequence he never caught sight of the fact that the farmers are a great social class and have a worth and dignity as such. It has wealth of enormous proportions, approximating one-fourth of the nation's wealth; numbers of still greater proportions, practically one-half of the nation's population; characteristics and interests which are common to its members and which differentiate it from all other social classes. Its work is worthy, its position secure, its future promising. But in commanding power and influence in the direction of national affairs this really great social class is lacking and manifests its extreme weakness. Only by its vote at election times does it demonstrate its existence. It has not enough power to protect itself from the exploitation of other classes of a predatory nature. It has been victimized by the politicians, the trusts, the railways, and now mercilessly by the middlemen. What it needs is to develop a class-consciousness which is self-respecting, potent for organization purposes relative to government and marketing, and which operates to secure a greater regard for its rights and possibilities.

On another side the farmer's social outlook has been wanting. In rural communities the community, sociability, associational side of life has lain fallow. There has been a reign of social stagnation and social poverty. Without social intercourse the life of the average person would be considered empty notwithstanding the largeness of the farm, the heavy yield of produce, the quality of live stock, and the extent of the bank account. In social matters, even to a greater degree than in those of finding satisfaction in living, the country is far behind the corresponding grades of city life.

In one sense this dearth is due to a lack of intellectual stimulus and ferment. Reading has not been cultivated as a source of pleasure and a means of larger information. Social intercourse of a larger general nature is likely to be empty where an intellectual circulating medium is absent. A grasp and discussion of the more important social matters awaits the development of information.

Associations of a recreative and entertainment sort are little appreciated in the country. Men of the farms have not discovered the play life. Its possibilities have not been opened to them. Organized games for the children and recreation for the adults are among the greatest desiderata of rural communities. Opportunities for these will present themselves as soon as their appreciation is developed.

Deficiencies of social contact and co-operative stimulus are apparent. Cities abound in means and agencies to satisfy these ends. Isolation has seemed to insulate farmers from each other. It is an obstacle whose gravity must be realized although its prohibitive strength is likely to be overrated. Organizations for bringing about community co-operative activities for both economic and sociability purposes are highly desirable and necessary and are coming into existence as fast as the appreciation of their worth is discovered by the farming community.

3. There are certain fundamentals which are incident to the realization of this needed point of view. They must be obtained before the larger and better outlook can be fully and permanently rooted as a part of the working capital of rural society.

(a) Leadership of a residential and effective kind is necessary to enable the country to work out its destiny along the lines indicated above. A trained resident leadership is largely wanting in agricultural neighborhoods. Young men and women who go to higher institutions of learning seldom settle in the country. Even the students from agricultural colleges must be included in this statement. The country is being sapped of its ability of the trained sort by the towns and cities.^a It has plenty of natural ability left but it is not developed into a working leadership. The country is therefore forced to look to other sources outside itself for initiative and organizing ability which is required. So long as this is the case it must suffer accordingly. Every class and community must ultimately expect to depend on its own intelligence and the sympathetic devotion of its own able managers. Even fairly intelligent communities are handicapped without them.

(b) The reorganization of rural education is a necessary step toward the realization of a changed viewpoint and a larger rural life. The country school is one of the few things that has remained

^a *Quarterly Journal*, University of North Dakota, October, 1910, pp. 67-70.

practically unchanged during the last quarter of a century. While farms have grown, farming has been improved, houses and barns have become larger and better, the country church has been better housed and manned, the old schoolhouse has remained as it was, and the course of study has become little more adjusted to the needs of the times. To meet the demands of the situation some important modifications must be made in rural schools.

First, they must be depended on to furnish the resident leadership which is required. Higher institutions of learning can not do this because of the leakages noted above, and because they can not touch the life of every boy and girl directly in necessary ways. A leadership must be informed on the things which are close to farm life; matters of agriculture, marketing, organization for protective purposes as well as for constructive objects, the worth and value of sociability functions of the up-building sort, and the improvement of home life. In order to understand and appreciate those things it must have a training and culture in them during the educational period. Every one must be so informed and skilled that he or she may rise to take a leading part in the affairs of the community if the ability is present. This means that the schools of the region must contain and teach the matters which are crucial and intrinsic to farm life. Agriculture, domestic economy, rural sociology, are some of the necessary and pressing subjects which must be taught.

Second, the consolidation of schools constitutes another necessary step to realize the object denoted. The single-room schoolhouse is entirely inadequate to meet the situation. It cannot supply the grading, the able teaching force, the equipment and room for carrying on work of a vocational nature, the numbers of pupils needed to carry on organized play, the differentiated housing and facilities demanded for the sociability, recreational, entertainment, and cultural activities of the adults as organized into a social center, and other important neighborhood functions. Moreover, the consolidated school, while providing for all of the above essential needs, can extend its course of study so as to include high-school work as a further qualification of that leadership and appreciative intelligence which the country neighborhood demands. The latter would afford time for the gradual and completer inculcation of the larger and finer ideals of life and teach the things which will make the

life of the average man and woman something more than a mere existence.

4. A closing remark may well be devoted to the proper point of view with which the rural problem is to be regarded. A very large part of the emphasis in the discussions of farm life has been laid on the necessity of improving it in order to keep the boys and girls from drifting to the cities. The assumption has been that the country needs them and that city attractions established in the country would be effective in holding them there. However effective this procedure might prove to accomplish what is urged, and its effectiveness may well be doubted, it does not appear to be the highest motive which may be furnished.

A more just view regards the improvement of farm life as a procedure which of right belongs to that great multitude of good people who will always be rural residents. They have a humanity in common with the residents of the cities. They have needs of life and work which they ought to realize if they can only obtain a vision of their possibility and worth. They are the heirs of the products which the myriads of the makers of civilization have created and conserved and should of right come into the enjoyment of them. Country populations have a right in their own stead to enjoy all that life offers, even if they do not contemplate leaving the soil for the city. The great problem is to discover a way by which their outlook on life and society may be transformed into one which appreciates the worth of realizing the greatest satisfactions and possibilities which may come to them as rural citizens of the great republic.

RURAL SOCIOLOGY AS A COLLEGE DISCIPLINE

BY KENYON L. BUTTERFIELD,

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In order to define the field of rural sociology it is necessary to outline the rural problem in such a way as to indicate the main lines of thought and types of subject matter that must be presented by an educational institution which designs to serve the needs of agriculture in whole or in part.

The Rural Problem

We may for this purpose, therefore, make an analysis of the rural problem under five heads:

1. The first is *the technical aspect*, the question being, "How can the individual farmer most effectively and economically utilize the laws of nature in the growing of plants and animals for human food?" From the standpoint of the farmer, this may be called "farm practice"; from the standpoint of the teacher, it embraces all of those technical subjects in the fields of agriculture, such as dairying, agronomy, pomology, etc., that help answer the question.

2. *The business aspect*, which involves the question, "How can the individual farmer, so organize the factors of production—land, labor, and capital—on his farm, so adapt farm practice to his particular branches of production, and so dispose of his products, as to yield to him the largest net return, while still maintaining the integrity of his land and equipment?" This represents the individual farmer at work on his particular farm, trying to make a living from it, under the necessity of following the best farm practice, and equally under the necessity of selling to advantage and of managing the business in an economical way. The term, "farm administration," may well be given to this field of study.

3. We come now to what may be called *the scientific aspect* of the farm question, in which this query is raised, "How can we learn more of those laws of nature which concern the growth of plants and animals for human uses, how apply those laws to the procuring of an increased food supply, and how, at the same time,

conserve the natural resources upon which the food supply depends?" If there is such a thing as "agricultural science," it develops in the attempt to answer this question. This field is, at present, covered by the various physical and biological sciences, such as chemistry, botany, zoology, etc., and their offshoots—like entomology—when developed on the economic side.

4. *The industrial aspect* of the farm question calls for an answer to this question, "How can farmers as a class secure the largest financial success while giving to consumers an adequate food supply and conserving soil resources?" This is the subject matter of "agricultural economics," and has to do with all those larger industrial questions which involve groups of farmers, farmers as a class, and the relationships of the farmers to other workers and to the nation as a whole.

5. *The community aspect.* Here we approach those questions that have more to do with the ultimate ends of life, with the welfare of the people as the great consideration, and in which this question is asked, "How can the people who farm, best utilize their industrial and social environment in the development of personal character, best co-operate for the common welfare, and so best organize permanent institutions which are to minister to the continued improvement of the common, or community, life?" This is the field of "rural sociology." It is simply an application of the principles of social science to the general welfare of the people who live under rural conditions.

Rural sociology is, therefore, concerned with the way in which farm people live together in their neighborhoods and as a class. It has to do with the reactions of human character under rural environment. It includes a description of the associated efforts that minister to the common desires, needs, and purposes of farm folk. It covers the problem of "better living," of "country life" as a whole. It emphasizes the large needs and methods of the common life of rural people. It involves the question of the permanence of a satisfactory rural civilization and of the social agencies, or institutions, necessary to such a civilization.

The Field of Rural Sociology

In order to make the boundaries of rural sociology still more definite, it may be well just here to make a brief analysis of the

subject so far as it relates to the general types, or classes, of material that are to be studied.

1. *The rural people themselves.* What is their status? What have been the movements of rural population—for what causes and with what results? Why have the cities grown at the expense of the country? We must understand also the social conditions of rural people, whether and how they differ from the urban residents as to race, families, health, crime, illiteracy, morals, temperance, defectives and dependents, insanity, etc. Does the rural environment produce a special series of characteristics? If so, what is the rural mind? In what way does the rural environment influence habits, customs, recreation, family life, individual traits, individualism itself, public opinion, superstition, leadership? What are the influences of nature, of the isolated mode of living, of class segregation, of special types of farming, of tenant farming, etc.?

2. We must also study the social institutions of rural life, how they are organized, how they differ from similar institutions in the cities, their special needs, their adaptability to rural conditions. We need to study family life itself; the schools and means of education, including the rural school; agricultural schools and colleges, and extension teaching; libraries; the church and its allies, such as the Sunday school, the young people's societies, the Y. M. C. A., the Y. W. C. A. We must study the associated efforts among the farmers, including clubs and societies, and the general organizations like the Grange and the Farmers' Union. We need to know the workings of government in their application to rural life and needs, including the national and state governments, but more particularly the local government in the rural communities; and we also need to study as a special field the general application of both common and statute law to rural affairs.

3. We cannot very well consider the rural problem in its social aspects without becoming convinced that the teacher of rural sociology should also be to some degree a propagandist. The rural problem itself is so significant and vital, the need for co-operative planning is so apparent, that it becomes necessary to develop a program for rural betterment, to indicate the means by which we may secure a larger development of the rural community. Therefore this work constitutes a distinct phase of rural sociology.

General Statement of the Farm Problem

Before going farther it may be well to make a general statement of the farm problem in order to indicate the significance of rural sociology as a subject of study, and also to show how the point of view of the student and teacher of rural sociology should include every phase of the problem and should relate the social to all the rest: "The American rural problem is to maintain upon the land a class of people who represent the best American ideals—in their industrial success, in their political influence, in their intelligence and moral character, and in their general social and class power."

The Place of Rural Sociology as a Subject of Study

Having analyzed the field, we may now indicate a little more intimately the special reasons why rural sociology should become an organic part of the course of study in an agricultural college. These remarks cannot be applied fully to the study of rural sociology as a part of the general courses in sociology in a college or university, and they are given here chiefly for the sake of making clear, if possible, the place which rural sociology ought to occupy in the scheme of agricultural education. We must discuss the principles underlying a college vocational course in agriculture.

1. A vocational course should lay the foundation for technical, or professional, skill and efficiency.
2. A vocational course should indicate to the pupil how social relationships bear upon one's work, how social and economic forces aid or hinder him as an individual.
3. A vocational course should show, conversely, how a person, by proper pursuit of his vocation, may and ought to make it a means of service to his fellowmen, and should thus indicate that the social motive must be present in an adequate pursuit of one's lifework.
4. A vocational course should show the pupil how to use his vocation as a means of personal growth or culture, intellectual and moral.

From the standpoint of an agricultural vocational course of college grade, in which the college directs its efforts toward training for all the main agricultural vocations, such as those of farmers, professional agriculturists, teachers, investigators, rural social

engineers, and so on, the social relationships of agriculture must be taught. Only in this way can the social character of the agriculturist's work be fully appreciated. Furthermore, the real rural problem must be understood and the need of rural community welfare and progress be appreciated, and the applications of rural leadership enforced, or else the social motive is likely to be absent. And, finally, the wonderful power of the rural vocation to contribute to one's personal growth and culture needs to be emphasized. Undoubtedly this power may be imparted through the technical subjects of study. Nevertheless, technical agriculture and farm administration, and even agricultural sciences, have more or less of the individual point of view. It is only when a man studies the industrial and social relationships of agriculture that he begins to appreciate his environment as a worker, a citizen, and a man—and may we not define culture as appreciation of environment?

Of course, when rural sociology is pursued not as part of a vocational course, but simply as a phase of social science, in a college or university, the excuse for giving it lies rather in the significance of the rural question as a part of the general social problem. While the ratio of rural population to total population is constantly decreasing and will continue to decrease indefinitely, nevertheless the total rural population will increase slowly. To-day nearly fifty millions of the rural people in the United States are living under the rural environment. Consequently, the welfare of these people and of the communities in which they live must be a vital concern to the student of the social question.

Courses in Rural Sociology

It may be asked what courses should be offered. In the college or university course, or in the agricultural college where it is not planned to develop rural sociology as a special department, two courses may be given. The first, a descriptive course, which might have the title, "The Rural Community." It need not necessarily be preceded by a general course in sociology, although undoubtedly that would be an advantage, but it should purpose to bring the student into touch with actual conditions and to interpret those conditions, both individual and institutional, in the light of the larger needs of country life.

The second course, whatever its title, should discuss the social

aspect of the rural problem. It should attempt an analysis of the entire problem and indicate not only the unity, or integrity, of the rural question, but also the supreme significance of the social welfare phases of it, and the fundamental importance of the rural question as a phase of national life.

In an agricultural college which means to make a good deal of the social aspect of the teaching of agriculture, the work in rural sociology will necessarily be somewhat highly specialized. Each instructor will, of course, work out his own problems, but there is suggested here an illustrative list of courses:

I. *Rural Sociology.*

1. The Rural Community—a general descriptive course
2. The Development of the Rural Community
3. The Rural Problem
4. The Rural Family
5. The School and the Rural Community
6. The Church and the Rural Problem
7. Farmers' Associations
8. Rural Government
9. Rural Law
10. The Social Psychology of Rural Life
11. The Social Status of the Rural People
12. Social Aspects of Current Agricultural Questions

II. *Agricultural Education.* (As a specialized phase of Rural Sociology.)

1. Elementary Agriculture
2. Secondary Agriculture
3. History of Agricultural Education
4. Organization of Courses in Agriculture
5. Administration of Agricultural Institutions
6. Extension Teaching in Agriculture
7. Agricultural Research.

There are two further phases of this subject of rural sociology as a college discipline that must not be left out of the question. The first is the need of investigations; the second, the need of a propaganda.

Investigations should be an organic part of the class work in

rural sociology. Community surveys are being undertaken under many auspices, and there are standard blanks for the purpose which can be easily utilized in class work. But a department of rural sociology should also participate, through its teaching force, in a comprehensive and thoroughly scientific study of all the social phases of rural life. We may have thoroughgoing agricultural surveys made under government auspices, or by privately endowed agencies, or by various voluntary associations. Either in co-operation with these or alone, the department of rural sociology should not fail to make investigational work a matter of large concern.

The same is true, at least in the agricultural college, in the organized movement for the betterment of agriculture and country life that may be represented by the phrase, "a campaign for rural progress," or in more sober terms, "the development of the rural community." The college has a responsible leadership in stimulating a constructive development of the rural community. It should emphasize the community-idea, enlarge upon the need of community ideals, assist in the arrangement of a constructive program of community building, help in an institutional division of labor by which the function of the various rural institutions is determined and the program for each one of them developed. Conferences on rural progress, plans for local community betterment, participation in a state-wide movement for the federation of rural social forces, are all parts of the legitimate work of a department of rural sociology in an agricultural college.

EDUCATION FOR AGRICULTURE

BY F. B. MUMFORD,

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There is no justification for any form of education which does not give to its possessor a greater efficiency. Any type of education that diminishes to any extent whatsoever the ability of a student to perform the practical duties of citizenship is a menace to the state. Educational institutions supported by federal or state governments must be able to demonstrate that they are competent to train men and women for every useful and important duty which will be required of them as American citizens. It will surely follow as night follows day that those institutions which are most successful in demonstrating their efficiency in training men and women for a more successful and useful citizenship will ultimately enjoy greatest favor from the far-sighted statesmen whose wise plans look forward to the perpetual development of our free institutions.

The agricultural colleges of the United States have enjoyed a period of unexampled prosperity in the past fifteen years. These institutions are peculiarly the wards of the state. There are no great privately endowed colleges of agriculture. These schools of learning must, from the very nature of things, have appealed to the representatives of the people as fulfilling a great fundamental mission in training for useful citizenship. Were it otherwise we would not have seen the large appropriations, first by the federal government and later by practically every state government in the United States. These appropriations are increasing and must continue to increase if the college is to meet even in a small degree the constant demands for help from the farmers, who are continually depending upon us for the solution of the many complex problems in agriculture.

The success of an educational institution is measured by the efficiency of its graduates. The graduate is asked not "how much do you know, but how much can you do? How well can you use knowledge acquired?"

If this test is applied to the graduate of the modern agricultural

college how well does he respond to the trial? The demand for agricultural college graduates as farm managers, teachers, investigators, dairy experts, veterinarians, expert judges of corn and live stock and forestry experts is increasing yearly, as these institutions are able to point more and more to the successful careers of the men who have enjoyed the training given there.

The supreme test of efficiency applied to an engineering school is the measure of success it attains in graduating great engineers. The greatest product of a law school is the great lawyer. The supreme and ultimate test of the value of an agricultural college training is the ability of the graduate to successfully achieve in agriculture as a vocation. It is a hopeful indication of the soundness of our educational policies that an increasingly large number of men go back to the farm, and there as elsewhere are they demonstrating that a college education may add to one's ability to perform the practical duties of citizenship and thus give some small return to the state for the training provided by a generous commonwealth.

But an agricultural college is not only a professional school, it is also a great scientific institution. In it must be trained that large body of teachers and investigators whose services are now in such great demand throughout the world. This phase of the work of an agricultural college has not yet reached the development its importance demands. Greater attention must be paid to the training of men for fundamental research. Graduate courses must be offered and the fullest opportunity must be given for the development of the spirit of investigation in students and faculty. This alone can vitalize the whole spirit of an institution and is justified from the standpoint of the certain results to be achieved for the science of agriculture.

ECONOMIC SIGNIFICANCE OF CHANGES IN COUNTRY POPULATION

BY T. N. CARVER, PH.D.,

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In many parts of the country a distinct tendency is noticeable for the old population to give way to a new population of an entirely different type. In parts of New Jersey this is taking the form of a system of farm tenancy. In this case the difference between the old population, which still owns the land but lives in the towns, and the new tenant population, which tills the farms, is not so much one of race or language as of religion and social position. The old families are mainly Presbyterian, while the new are Methodist, Catholic and nondescript. In parts of New England the new population is French Canadian, Italian, Portuguese, Polish and, in a few places, Swedish. Here the tenancy system is making little headway, the new class of farmers usually buying the land outright. In parts of the Middle West, also, there is a distinct tendency for foreign born farmers to displace native born. In some places a second phase of this process is showing itself. Foreigners of an earlier migration are being displaced by foreigners of a later migration.

Professor Hibbard has shown¹ that the growth of the tenancy system in this country depends largely upon the fertility and the value of the land. Where land is valuable property, the original owners prefer to hold on to it and to become a landed aristocracy, leasing their farms to tenants. Where, as in parts of New England, the land is not valuable enough for that purpose, they prefer to sell it outright to the new farming population as soon as they can find buyers. But whether the incoming population becomes a land owning or a tenant population, it seems always to be a population with a lower standard of living than that which is displaced. This is the important economic fact to be considered. Is it true, and must it always remain true, that the men with the lower standard of living shall drive out the men of the higher standard? If so, where will this tendency carry us? Will Professor Ross's prophecy²

¹ See *Quarterly Journal of Economics*, August and November, 1911.

² Paper read at the annual meeting of the American Economic Association, December, 1911.

that lower and lower classes of immigrants will continually displace the higher on American soil until eventually the United States will become an Asiatic colony, prove to have been a scientific prediction?

What the final outcome of this battle of the standards will be it is not easy to predict. On the whole, it looks as though a cheap standard of living would drive out an expensive standard as surely as a cheap standard of value would drive out an expensive one. In addition to the tendencies already noted in the rural districts for the immigrants with a lower standard to displace those of a higher, there is the fact that the young man from the country, with his simpler habits and severer discipline in work, seems, when he comes to town, to get on better than the young man from the city, except in the talking professions and other positions where polish and urbanity are factors in success. Moreover, throughout history, there has always been noticeable the same tendency. The Gascons at one time, and the Normans at another, have ruled France. The Austrians at one time and the Prussians at another have ruled Germany. The Magyars at one time ruled Hungary, taking possession of the valleys and driving the more highly civilized predecessors to the mountains. Now the process is reversed and the Magyars are being displaced through the process of economic competition by the Czechs. All these seem to be mere repetitions of the same phenomenon which gave Egypt to the Shepherd Kings and the Roman Empire to the Germans, except that at one time the domination of the lower standard over the higher comes through military conquest and at another the displacement of the higher by the lower comes through economic competition.

This aspect of the problem should cause us to consider carefully before we place too much confidence in those methods of protecting the higher standard of living against the competition of the lower, namely, the restriction of immigration and the minimum wage law. Though these devices are undoubtedly necessary, and would temporarily protect the higher standard against displacement by the lower, it is probable that eventually the battle would have to be fought over again in a new form. A restriction of immigration, coupled with a minimum wage law, would keep out all immigrants who could not secure jobs at the minimum wage. This would exclude the lowest classes. The minimum wage law would protect

the higher standard of living by making it impossible for people with the very lowest standard to underbid those with a slightly higher standard. This would accomplish something, but it is difficult to see how it would stop the farmers with a lower standard from buying or renting the land away from farmers with a higher standard. Of two farmers who are able to grow equally good crops, the one with the cheapest standard of living can accumulate capital most rapidly. He, therefore, can outbid the other in competition for land, whether they are in the market as buyers or as renters. Even under the single tax, the same result would follow, for the farmer who could offer the state the largest rental for the land would get it. The minimum wage law would not affect this process at all, and the restriction of immigration would only retard it. Immigration from Heaven is quite as much a factor as immigration from the Eastern Hemisphere, and immigration from Heaven is favored by a low standard of living. The only protection against this form of displacement by a low standard of living is through educational and other agencies which will tend to raise the standard of all the people; but this is ineffective unless supported by a restriction of immigration coupled with a minimum wage law.

There is another consideration, however, which must be faced by everyone who looks beyond the immediate future. Suppose this country should, by all these methods, protect the higher against the lower standards of living, and so educate its own people as to raise their standards higher than they are now, there is still the danger of international competition. It is not necessarily true that the nation with the highest standard of living must be the most efficient, either in industry or war. There is not the slightest doubt that the lower standard of living in Germany as compared with England is one important factor in her recent successes in international competition. Here is a case where the lower standard of living does not interfere with mechanical or industrial efficiency. There is no sufficient reason for believing that the still lower standards of Japan and China may not also be quite consistent with the higher efficiency in production. In short, it is by no means certain that we have secured a final and complete protection of a high standard of living against displacement by a low standard when we have restricted immigration, established a minimum wage and educated our people up to a high standard. No scheme of political or governmental

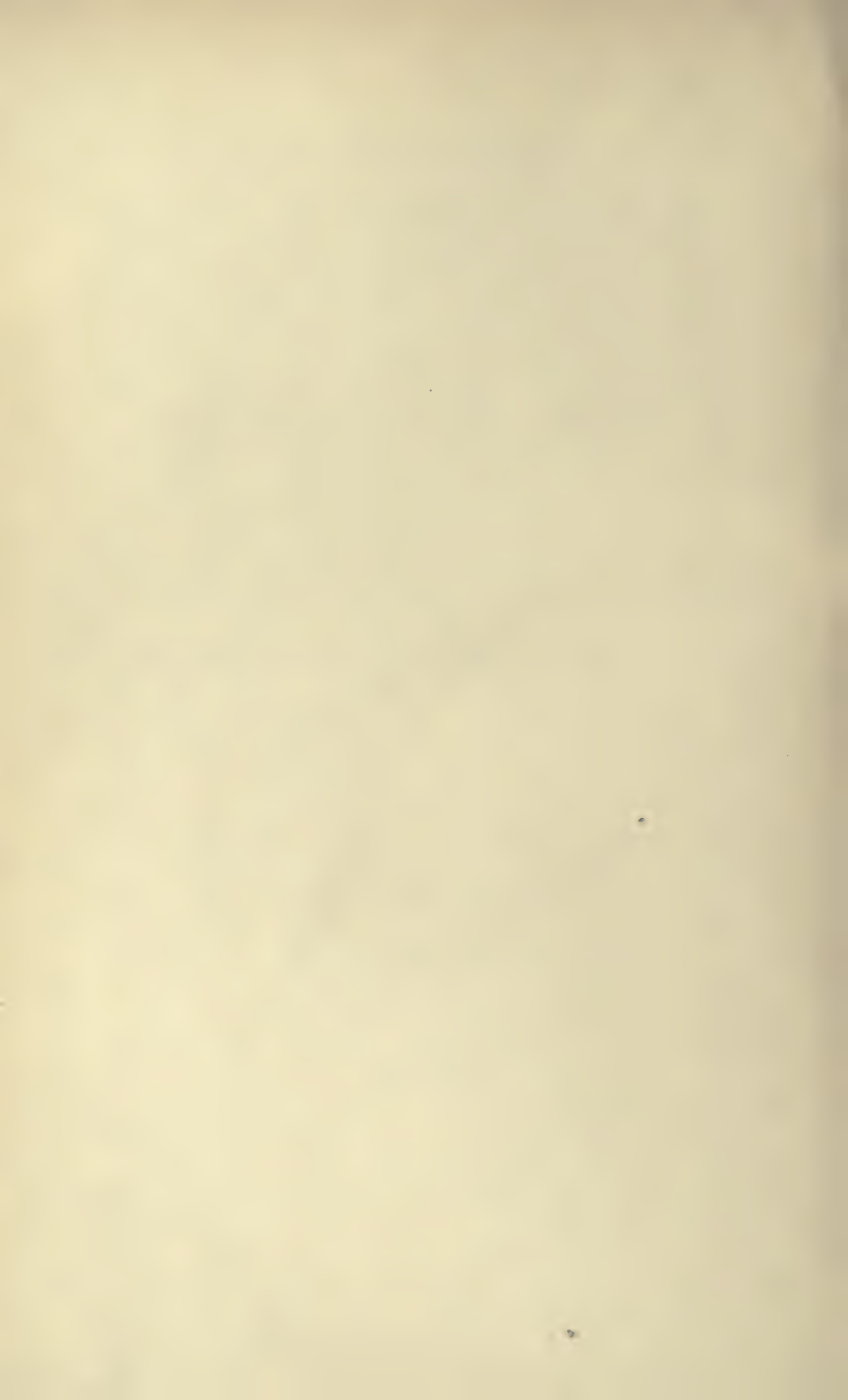
protection is likely to secure a standard against competition from one source or another. The battle of the standards is inevitable, and the victory will go ultimately to the most efficient. In other words, in the final result, a standard of living is protected by its own efficiency, and by that alone.

This suggests the important distinction between a high standard and an efficient standard. A high standard of living ordinarily means merely an expensive standard. If every additional expense added to one's standard of living adds correspondingly to his productive efficiency, then a high standard is also an efficient standard; but if it does not in some way increase his efficiency, then it is merely an expensive standard, and will handicap its possessor in the struggle for existence, whether that struggle is waged by the destructive methods of warfare or the productive methods of economic competition. The problem of the permanent maintenance of a high standard of living is, in final analysis, the problem of rationalizing the high standard and making it efficient. Otherwise it will sooner or later be driven out by a lower standard. This is also the problem of civilization, for, unless this problem of rationalizing the high standard of living can be worked out, so that it can hold its own against low standards, then, as soon as we have exhausted the native resources of our continent, and European races have lost their markets for their manufactures, our civilization must sink back to the condition of all old civilizations where the mass of the people live on the minimum of subsistence. When, therefore, we begin to take the long look ahead, we shall find that the problem of the consumption of wealth is the most fundamental of all economic problems.

Meanwhile, there is a more immediate and practical consideration. It looks as though any effective restriction of immigration was a long way off, and a minimum wage law would hardly affect the rural situation at all. How then can an American standard of living defend itself against displacement by a cheaper standard? The only answer is: by becoming a rational and efficient standard instead of merely an expensive standard. That is to say, if the increased expenditure of the American farmer's family can be made to yield returns in greater efficiency, greater intelligence, greater mental alertness, more exact scientific knowledge and calculation, then the American farmer will not be displaced by the foreigner.

But if the rising cost of living for the American farm family is due to a mere demand for luxury, for expensive vices, and for ostentation, there is no power on earth which will protect his standard of living. Such a farmer is handicapped in competition with the more simple minded foreigner, and the latter will offer such prices for land as the former will not be able to pay. Being unable to maintain a family on such a standard, this type of American farmer will sacrifice his desire for a family, will have fewer children or none at all, and, in a few generations, will disappear altogether.

The change in the characteristics of our rural population is, from the point of view just discussed, merely a phase of the universal struggle among standards of living, and here, as elsewhere, efficiency wins. Whether we like it or not, this struggle is going to continue, and the victory is going to continue to fall on the side of efficiency. The sooner we accept this fact, and make up our minds to adjust ourselves to it, the better it will be for us.



PART TWO

Rural Industrial Problems



FARM TENANCY IN THE UNITED STATES

BY BENJAMIN HORACE HIBBARD,
United States Census Bureau, Washington.

Are we becoming a nation of landlords and tenants? The question has been asked many times during the past quarter century, and very many times it has been answered in the affirmative. Tenancy has on the other hand frequently been called a stepping stone to ownership on the ground that a young man starting out as a farmer rents land for a few years, and later buys. That this is true to a great degree cannot be doubted since it has been shown by the census statistics that farmers of the lower age groups are more largely tenants than owners, while in the higher age groups tenants become few, and owners many. However, for the country as a whole, the proportion of tenancy seems to be increasing at a positive, though not rapid rate, suggesting that the stepping-stones of tenancy are getting somewhat farther apart and the passage over them to the ownership beyond becoming correspondingly more difficult of accomplishment. Possibly one or the other of these answers is correct, but before accepting either it will be well to make an analytical study of the case, since the United States is much too large, the farms too varied in character, and the farmers themselves too unlike to permit of many broad, safe generalizations.

With the possible exception of the negroes of the South there is no tenant class of farmers. That is to say, there are no considerable numbers of farmers who look upon themselves, or who may properly be looked upon, as probable life-long tenants. In contrast to this situation a great part of the English farmers have little prospect of becoming land owners, many in fact not even wishing to buy land since the return on money so invested is less than on other investments which they are disposed to make. In this country very few farmers rent land from choice, preferring, in substantially all cases it may be assumed, to become owners as soon as circumstances will permit.

The authentic history of tenancy in America extends over a period of but thirty years, 1880 being the first time a census of farm tenure was made. The following table shows for the United

States as a whole, and for the five geographic divisions, the percentage of tenant farms to all farms at each census year, 1880 to 1910.

PER CENT OF TENANCY 1880 TO 1910

| | 1910 | 1900 | 1890 | 1880 |
|-------------------------------|------|------|------|------|
| United States | 37.0 | 35.3 | 28.4 | 25.5 |
| North Atlantic division | 18.2 | 20.8 | 18.4 | 16.0 |
| South Atlantic division | 45.9 | 44.2 | 38.5 | 36.1 |
| North Central division | 28.9 | 27.9 | 33.4 | 20.5 |
| South Central division | 51.7 | 48.6 | 38.5 | 36.2 |
| Western division | 14.1 | 16.6 | 12.1 | 14.0 |

It will be noticed that from 1880 to 1900, not only for the whole country, but for all of the geographic divisions except one, the proportion of tenant to owned farms shows an uninterrupted increase. In 1880 out of every hundred farms in the United States 25 were operated by tenants, by 1890 the number had risen to 28, by 1900 to 35 and stands for the last census at 37. The number of tenant farms increased 130 per cent during the thirty years, while the owned farms increased but 34 per cent. If the same rates of increase should continue for another thirty years, one-half of all the farms of the country would be in the hands of tenants.

However, the rate of increase for the country as a whole has already slackened, and for the North Atlantic division, the Western division and four states of the South Atlantic division there has been a decrease in the proportion of tenant farms. In other words there has been a decrease in tenancy in the whole of the East to the north of North Carolina and in the greater part of the West including the western border of the Great Plains and from there to the Pacific Ocean. In number of states and in area, these two regions comprise about half of the United States. This leaves the Mississippi Valley, the Gulf States and three Southern States bordering on the Atlantic as the region within which the number of tenants has gained on the number of owners. It may be noted further that within the group of states in which the proportion of tenancy has decreased, it was already lower than the average for the country, and conversely in the sections in which it has increased, it was already high. That is to say, the movement had been in progress for a considerable length of time so far as a drawing apart of the proportion of tenancy in these sections was concerned, except that in the groups of states in which the decline in

the proportion of tenancy has recently occurred there had previously been an advance at a slow, instead of a rapid rate. It is in the great grain-growing districts of the Middle West, and in the cotton and rice growing districts of the South, that tenancy has reached its greatest height and still shows the greatest tendency to increase. In the North the increase in tenancy is associated mainly with the land highest in price, and moreover, with land which has increased in price more rapidly than any other great amount of land in the country. In the South, tenancy is more prevalent than anywhere else in the United States and follows mainly the line of crops produced by the Negroes, for the most part cotton. Where the most cotton is grown the proportion of Negro farmers is highest, and there also the percentage of tenancy is highest. The difference between the tenant of the upper Mississippi Valley and the lower Mississippi Valley is very marked.

In the North he has, with few exceptions, enough farm equipment of his own to enable him to get along independently of the landlord in that regard. He owns probably a thousand dollars worth of live stock and implements. He rents a farm varying little in size from the average of the district in which he lives, perhaps 160 acres in Iowa, or 240 acres in South Dakota. The value of the land is about the average for all land of the neighborhood in which it is located, about \$100 an acre in Iowa, more than that in Illinois and less farther west and north. Thus the tenant of this part of the country owns a considerable amount of property and is in charge of a farm worth from ten to twenty thousand dollars. In the South a tenant usually owns very little live stock and very little in the form of implements, both classes of equipment being furnished in great numbers of cases by the landlord. Moreover, he rents a small instead of a large farm, usually 20 to 40 acres, and instead of managing it independently, works under the direction of his landlord. In neither East nor West are the tenant conditions so clear cut as in the Middle West or the South, due apparently to the prevalence of a greater proportion of specialized types of farming, some of which are quite usually carried on by tenants, some quite seldom.

Viewing the geographic divisions of states separately it is to be seen that the proportion of tenant farms follows in many cases quite closely the value of land per acre, in other cases the value

of farms as units, while in still other cases the determining factor seems very clearly to be the character of the farming to which the district is adapted. Beginning with the North Atlantic States it may be noticed that the value of land per acre corresponds very closely to the rate of tenancy. Counting New England as a unit, since some of the states are too small and too thickly dotted with cities to permit of a fair comparison with the states having great areas of farm land, the rank in value of land and in tenancy corresponds exactly.

As compared to the North Central States, the value of land for this whole group is low. The highest value per acre found in any one of the North Atlantic States is in New Jersey, and it is slightly below the average for the North Central States as a whole. Likewise the proportion of tenancy is lower. For New England the value of land is decidedly low, and correspondingly, the rate of tenancy is lower than in any other of the older states of the Union. Some important variations in the relation of price of land to rate of tenancy are found in the vicinity of the cities where there are a great number of suburban homes with sufficient land to be counted as farms. These are, with few exceptions, owned by their occupants and the value is above the amount justified by the agricultural capacity of the land.

Nevertheless the highest proportion of tenancy is found in connection with land highest in price within the states in which general agriculture predominates. For example in Pennsylvania, by dividing the counties into three groups on the basis of land values, it is found that in the group of highest price, 29 per cent of the farms are operated by tenants, in the group of medium price, 21 per cent are so operated, and in the group of lowest priced land the percentage is 16. A similar situation is found in New York, except that the difference between the first and second groups is very much less, due undoubtedly to the ownership of suburban homes mentioned above. In New England the case is complicated by the suburban home—sometimes in reality many miles from the city—and by the various kinds of specialized farming, particularly fruit farming. In New Jersey the greatest percentage of tenancy is on land of medium price, the suburban homes and the fruit farms being plentiful enough to over-balance the tendency of the general farming districts.

In this section of the country the type of farming shows a clearer line of demarkation between owner and tenant than does value of land. The tenants here, as elsewhere, gravitate toward the farms suited to their immediate wants and powers. The tenant wants an opportunity to make quick returns from small capital. He wants quick returns because he is not financially able to make long-time investments and his short-time investment must be a relatively small one; if he had the means he would buy a farm and cease at once to be a tenant. Hence the tenant wants a farm of such a character that he may be able to go upon it with small equipment and in the space of a single season produce crops which, within the year, may be sold. It is not surprising, therefore, to find the tenants producing much more than their proportional share of the grain. In New York, for example, they grow 50 per cent more than their share of wheat; in Pennsylvania, 75 per cent more, and in New Jersey, 76 per cent more. The same principle holds true in connection with the other leading field crops, corn, oats, hay and forage. Within the counties of all of these states in which the grain crops predominate, the percentage of tenancy is above that for the states as units, and although the land on which such crops are grown is not the highest in price of any in the states, it is well above the average.

As a rule tenants keep much less live stock than do land-owning farmers. The reasons for this are clear. They are not able to make the initial investment; they are likely to move every few years and it is not convenient to move live stock and fit the numbers to the barn room and pasture of the newly occupied farm. Moreover, the landlord, while he usually professes to want a tenant who will keep live stock, is seldom anxious to provide the necessary facilities for doing so, and even if one landlord would, the next probably would not, and the tenant does not wish to take the chances. A notable exception to the small amount of live stock kept by tenants is found in connection with the dairy industry, particularly of New York and Pennsylvania. To begin with, dairying is a well-developed business among the farmers of these states, a large number of farms being adapted to it and equipped for it. Hence if a tenant dairyman moves he is likely to be able to find another dairy farm not far away. The question will at once arise—how can the dairy tenant invest in a herd of cows and all that goes

with it to equip a dairy, while other tenants are unable to keep much live stock? The answer is that he cannot in most cases, but in order to find tenants for dairy farms the landlords have solved the problem by furnishing a large part of the equipment, sometimes all, sometimes half of the cows, and making the tenant a partner in the conduct of the business. This arrangement is not at all usual in the West.

One of the leading types of farming in the East is that of growing fruit. In this connection the tendency in respect to the tenant question is clear cut. The tenant is not a fruit farmer. In the first place the growing of fruit is a continuous process to be begun one year and carried through several, even through decades. The tenant cannot be secure in his possession of a farm long enough to warrant him in planting orchards and vineyards. On the other hand he is rarely such a good fruit grower as to make it desirable on the part of a landlord to trust him with a fruit farm already developed. The State of New Jersey furnishes a good example of the facts of tenancy in its relation to fruit growing. In the counties where the most fruit is produced, the rate of tenancy is in several instances but about half that for the state, and the rate for the state is but about two-thirds as high as for the United States as a whole.

Vegetables, on the other hand, are to a very great extent produced by tenants. As a rule the best available vegetable land is high in price, often high because of other possible uses, and the income from it therefore more or less incidental. It is often rented out for cash to residents of the cities or towns who find it impossible to buy such land, but who are able to plant, tend and sell vegetables, beginning and finishing the process within a year, and so are not seriously inconvenienced by moving if need be from year to year. Some vegetable crops especially seem to fit into a system of tenancy; for example, potatoes, sweet potatoes and tomatoes are grown in various districts to a much greater extent by tenants than by owners.

In the Middle West the tenancy situation is relatively simple, since the types of farming predominating there are fewer and less complex than in the East. For this reason the leading characteristics of the tenant and the tenant farms are more easily traced. There is, however, a very wide range in the character and value of

farm land within the Middle West. For instance, farms in central Illinois are selling for \$200 and even \$300 per acre, while in western North Dakota, or northern Minnesota quotations of five-dollar land are still being made. These are important facts from the standpoint of farm ownership and tenancy. The first and most general fact in explanation of the situation is the coincidence of high value of land and a high proportion of tenant farms. In nine states of the twelve in the North Central division, the rank in tenancy and the rank in value of land, are remarkably similar, the order being from the standpoint of land value, Illinois, Iowa, Indiana, Ohio, Missouri, Minnesota, South Dakota, Michigan, North Dakota; from the standpoint of tenancy, Illinois, Iowa, Indiana, Missouri, Ohio, South Dakota, Minnesota, Michigan, North Dakota. It will be noticed that Wisconsin, Kansas and Nebraska are not included in this ranking. In Wisconsin tenancy has been lower than in other states of this section as far back as the record goes. This is due no doubt mainly to the large numbers of Germans and Norwegians who always buy land where it is possible to do so; to the prevalence of the dairy industry which in the Middle West is carried on very little by tenants; and to the fact that Wisconsin is not as well adapted as most other states of the section to grain farming on the extensive plan. In Kansas and Nebraska the proportion of tenancy is high in proportion to the price of land. Great numbers of speculators from farther east have gone into these states to buy land, and not wishing to farm it themselves have offered it for rent. In no other part of the United States does the tenant find a better chance to do a big business of the extensive farming type than here. He can use as big plows and harrows and seeders as are made. He can sow in the spring and sell in the fall. In Minnesota and the Dakotas, where conditions are somewhat similar, there is still too much unoccupied land to permit of finding tenants. The tenant of other sections is moving there in order to buy for himself, thus making the proportion of owned farms high, and tenant farms low.

On the highest-priced land of Illinois and Iowa, the proportion of tenancy is increasing rapidly, the size of the farm increasing, and the number of rural people per square mile, decreasing. It all seems to be part of a general movement. The land is getting too high in price for a young man to buy. He must be a tenant for

some years at best, and then the chances are that he will move to a section of country where land is cheaper. But on this high-priced land the tenant can grow grain to fair advantage without great outlay. Meanwhile the owner of the land is looking for only modest returns in the form of rent, since he expects the land itself to increase in value. He believes the fertility of the soil will not be depleted seriously during the time he owns it, and therefore takes no very vital interest keeping it up to its best. This attitude suits the tenant since his interest in the fertility of this particular soil will cease with the termination of his last lease contract and he expects that time to be no great distance off. The whole tenant regime is in this way one of soil exploitation and speculation. The buildings are worth but about five-sixths as much on tenant farms as on owned farms, though the implements owned by the tenant are but little below in value those of the land-owning farmer. The tenant is not noticeably short of equipment in the form of implements. In the matter of cattle and sheep he has but about three-fourths of his proportional share, and he produces a like proportion of the hay and forage crop. It is as a grain farmer that the tenant ranks high. In the production of corn especially the tenant excels, raising one-third more than his relative amount. The same condition holds, though to a less degree, with respect to the production of nearly all other grain crops, though in this division of states low-priced land farmed by the owner is characteristic of the wheat regions and in consequence the higher proportion of wheat is here grown by land owners.

Around the outer portion of this group of states is a belt of country in which tenancy is not so prevalent as in the central portion. In southern and eastern Ohio sheep raising and dairying are the leading types of farming. In Michigan there is much cheap land and much fruit land. In Wisconsin the northern portion is still within reach of the farmer of moderate means. The same is true of Minnesota, while in the Dakotas and Nebraska and Kansas there still remains a little government land to be had at small price or homesteaded. In Missouri, the Ozark district is being sold out in small tracts, largely, for fruit farms. In southern Illinois and Indiana, the character of the country is such that the price of land has remained low. Throughout this entire belt, the rate of tenancy is below half that of the average for the division as a whole.

In the Western division of states, eleven in number, comprising two-fifths of the entire area of the United States, the number of farms is small, though the character of the agriculture is greatly varied. The proportion of tenancy is for the whole division low, but far from uniformly distributed. The general facts noted in connection with the East and Middle West hold good also in the far West. Here are a larger number of fruit farms in proportion to all farms than anywhere else in the United States. At the same time there are many vegetable farms, while in some sections the genuine grain farms are found in great numbers. The fruit farms are almost altogether in the hands of owners, the vegetable farms very largely in the hands of tenants, while in the grain farming districts although the greater proportion are in the hands of owners, the tenants are in evidence in larger numbers than for the whole division on an average. For example in southeastern Washington a million acres have been added to the wheat fields within a decade, and in this district the tenants are much more numerous than in any other part of the state; they raise much more than their proportional share of the wheat. In the counties of Washington in which fruit growing has had its greatest development tenancy is the lowest of any in the state. The same is true of Oregon, California, and Colorado, the three states in which fruit growing has reached its greatest development in the West.

In all of the Western division of states the proportion of tenancy is low on account of the great numbers of farms recently acquired from the government in the form of homesteads, Carey Act entries and otherwise. These farms are almost necessarily counted as owned farms for several years at least, and since it is difficult to find tenants where land is so easily obtained under ownership, it is likely to be farmed by the owner or not at all. Another class of farms, nearly all of which are operated by owners, are those on which live stock is the main source of income. Thus the live stock and fruit industries, together with the abundance of cheap land suffice to keep the proportion of tenants at proportion but two-fifths as high as that for the United States as a whole.

In the four northern states of the South Atlantic division the proportion of tenancy has decreased during the past decade. These states join the North Atlantic States, and unquestionably the movement over the North Atlantic States together with these four, is a

common one. In these four states the type of farming is quite like that of the states immediately to the north. For example, there has been recently a great development in fruit growing. Farms have decreased a little in average size. The amount of grain grown has declined. All of these facts point toward ownership rather than tenancy. Farther to the south, and this is the real South, the proportion of tenancy has been on the increase throughout the entire period since 1880. In these states the situation is essentially different from that of any part of the country. Here, and here only, is there a tenant class—that is to say, the Negroes. Land owners in this section of the country expect to continue some sort of a renting plan permanently. Probably the main reason for this is the difficulty of hiring labor. Since the freeing of the Negroes they have not been a reliable class as farm laborers. After the close of the reconstruction period a system of tenancy developed, ranging from the irresponsible tenant to whom equipment and provisions are furnished in advance of the crop produced, and who, in turn, has little hope of receiving anything more than enough to square him with the landlord, to the cash tenant who pays his rent actually in cash, but of the latter class there are very few. The more usual type is the “standing renter” who delivers a certain prescribed quantity of crop. Socially, he is more independent than the share tenant, economically, he probably is not.

This system of tenancy has often been condemned as malicious, since the tenant seldom makes little more than a bare living and since it is difficult under it to establish a good system of crop rotation, the Negro preferring, wherever possible, to grow cotton and little or nothing else. Nevertheless, it has its good features. Under it the Negro is learning the responsibilities of farm management and is slowly but surely bettering his economic position. Unquestionably the status of the tenant is better than that of the laborer who works here and there by the day, and, for the most part, better than that of the regularly employed laborers. Although the Negroes are acquiring more and more land as the years pass, it is altogether probable that the system of tenancy now prevailing will, with modifications, continue for a long time to come—that is to say, there will be among the Negroes a very large number of tenants. At the present time, in some of the leading cotton-growing counties of Mississippi, the proportion of Negro farmers is

above 90 per cent and at the same time the proportion of tenant farmers is above 90 per cent—the Negro farmers and the tenants being for the most part the same.

Tenancy is not necessarily bad, though as found in this country it has some very undesirable features. The tenant is a transient, and it is useless to insist that the contract should be made for a long period of years. The landlord himself, who often complains because tenants move so frequently, usually wants to reserve the right to sell his land, and terminate the lease with the sale. The majority of northern landlords are speculators in the sense that they are watching for a chance to sell or buy farms whenever opportunity for profit in doing so presents itself. This being the case tenant problems are subsidiary to the speculative program. It will be difficult to evolve a good system of tenancy while this condition lasts. In the South farms are much more often viewed as permanent possessions, and there tenancy plans can more readily be put into practice.

The tenant takes little interest in community affairs. The questions of schools, churches, or roads are of small moment to him. He does not wish to invest in enterprises which will of necessity be left wholly, and gratuitously, to his successor. He is little concerned with farmers' organizations. In short, he is in a community but hardly of it. These facts, together with his tendency to exploit the soil are reasons enough why ownership is a better system than tenancy. On the other hand, tenancy often makes ownership possible. A better credit system, and a more economical means of marketing farm produce and buying provisions and supplies would go a long way toward enabling the tenant to buy land at an earlier period of life. Likewise when land ceases to rise so rapidly in value the landlord will learn to watch less anxiously for a chance to sell and take more interest in developing a desirable relationship between himself and the man who tills his land. Until these conditions arrive there will be much to be desired in the American system of tenancy.

AGRICULTURAL LABORERS IN THE UNITED STATES

BY JOHN LEE COULTER,

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The Census of 1900 is authority for the statement that the number of persons engaged in agriculture was, at that time, slightly more than 10,000,000. Since the number of farms in 1900 was reported to be 5,740,000, it is clear that the number of agricultural laborers was less than two per farm. In order to understand what is meant by "agricultural laborers" it might be noted that this included all persons ten years of age and over employed in agriculture. If we subtract the total number of regular resident farmers from the number of persons engaged in agriculture we have remaining slightly more than 4,500,000 persons. This includes members of farmers' families in addition to hired laborers.

The Census of 1900 further shows that the average laborer's income, for each person engaged in agriculture, slightly exceeded \$288 in the United States as a whole. Since the amount expended for hired labor by all resident farmers in the United States in 1899 was nearly \$355,000,000, it is clear that there must have been at least 1,231,000 hired laborers and the number probably equaled 1,500,000 or more, inasmuch as many of these laborers were not employed for the entire year. Further study brings us to the conclusion that probably 3,000,000 of the persons engaged in agriculture referred to are members of the farmers' families.

Without this analysis, and it should be greatly enlarged upon, it is practically impossible to give any intelligent report concerning the status of agricultural laborers in the United States, and even with this brief statement it is very difficult to summarize the question satisfactorily. We may say, however, in a general way that there were slightly less than 6,000,000 resident farmers. Of course we are safe in concluding that practically all of these live in some kind of a farm home, and, therefore, we may say, that at that time, there were nearly 6,000,000 farm homes. Some of these may have been in small towns and villages. We may also conclude that in addition to the heads of the families there were some 3,000,000 mem-

bers of the families over ten years of age who worked for their living on the farms. This doubtless represents quite closely the number of grown sons who had remained on the farm and who had not yet established separate farm homes. We may safely conclude that this 3,000,000 lived in the homes of their parents, and, therefore, probably nearly 9,000,000 of the persons gainfully employed in agriculture lived in homes in the open country. This leaves probably less than 1,500,000 hired laborers who very largely move from farm to farm seeking employment where they may. It is also doubtless true that many of these same transient laborers secure employment during a considerable part of the year in cities and villages as well as in lumber camps, on railroads, etc.

It would not be quite correct to conclude from this general survey that nearly 9,000,000 of the persons engaged in agriculture represent the unchanging farm laborer class, and that the 1,500,000 represent the transient employees, because as a matter of fact there is a very large amount of changing constantly going on among the 9,000,000. It should be noted in passing that more than 2,000,000 of the less than 6,000,000 farms—that is to say more than thirty-five per cent of all the farms—were operated by tenants. Even allowing for a very small change among the owners and managers, it is probable that not less than 1,000,000 farmers change their residence each year. We have, therefore, probably 2,500,000 more or less transient persons engaged in agriculture; this can easily be expanded to 3,000,000 persons when we include the grown sons of the farmers who have changed their residence. It is none the less true, however, that there were nearly 6,000,000 country homes to be occupied.

If we turn now to the Census of 1910 we find that the number of farms has increased to nearly 6,400,000, and we may assume that the number of farm homes has increased accordingly. We may also assume, although the reports are not yet available, that the number of persons gainfully employed in agriculture has increased at much the same ratio. Unless there has been a decrease in the birth rate, the number of members of the farmers' families, who have remained on the farm, probably has kept pace with the increase in the number of farms. During the last decade there has been a considerable increase in the number of farms operated by tenants—the number now being more than 2,350,000. At the present time thirty-seven per cent are operated by tenants. This doubtless means that the

percentage of farmers who may be classed among transients has increased materially during the decade.

The Census of 1900 did not tell how many resident farmers employed hired labor; the estimate made (1,500,000) was doubtless far too low, since it was based upon the theory that most of those employed were employed for the greater part of the year. The Census of 1910 gives information which was not available ten years earlier. According to the present Census almost 3,000,000 resident farmers employed transient laborers during the year 1909—in other words, forty-six out of each one hundred farmers employed transient laborers. It would appear from this that, unless the same transient laborers were employed by different farmers at different seasons of the year, there are available approximately 3,000,000 transient farm laborers. If there are this many transient farm laborers, we can readily see that the number of persons gainfully employed who are more or less transient, including tenants and owners who move during an average year, must be not far from 5,000,000.

Passing now from the volume of farm laborers to a consideration of other problems, it must be clear that with so many farm laborers moving constantly from place to place there is the best possible opportunity for competition. Not only is there opportunity for competition among these persons for places on farms, but there is a very good opportunity for these same persons to secure employment in cities, lumber camps, and other places. There is also the best possible opportunity for these men to familiarize themselves with conditions in different parts of the country, and make that section where they secure the best treatment their home. In this way treatment may be equalized more or less in different parts of the country.

Probably the best possible opportunity which comes to these men is the opportunity to study methods of conducting agricultural operations in different parts of the country. As a result of this study and as a result of their serving more or less in the capacity of apprentices, at the same time receiving good wages, this class, numbering 5,000,000 or nearly that many, is in a position to become owners of farms. It is a fact that agricultural laborers can change to the status of tenants in some parts of the country with little or no effort, merely by expressing their desire to change. In some sections

of the country, notably parts of the South, the status of the hired laborer does not greatly differ from that of some classes of tenants. The average income probably does not vary greatly, and in some sections the hired laborer who has a family is furnished with as satisfactory a home as is the farm tenant who comes without equipment and must be constantly directed in his work. Not only are these hired laborers, who represent the more transient element of our agricultural population, eligible to the position of tenants and managers, they may even yet with considerable ease become owners of small tracts of land in various parts of the country, or they may take up claims of different kinds or in many other ways establish themselves as farm owners. There is doubtless still a very good opportunity for farm laborers who work for a wage to become tenants, owners, or managers of farms.

It would be impossible in such a brief treatment of the subject as I have attempted here to compare the relative status of farm laborers in different parts of the United States, or to compare the relative income. Suffice it to say that in practically all sections of the country the farm laborer, who is not a member of the family and who is hired for a definite wage, is furnished with board and a place to live. The Census of 1910 shows that twenty per cent of the total amount reported as expended for hired labor during the year 1909 was in the form of rent and board, only eighty per cent being in the form of cash. In some sections of the country small separate buildings are furnished to the hired laborers who have families. In some sections separate buildings are furnished for all hired employees. This, however, is only possible on the large farms or plantations, where separate quarters are sometimes maintained and is a very small part of the total.

The reports show that not only do forty-six out of every one hundred resident farmers employ labor, but also that the average expenditure per farm, including the value of rent and board furnished, is less than \$225. From this we are safe in concluding, even if we do not know the facts, that the customary thing on approximately half of the farms in the United States is for the resident farmer to employ from one to four or five persons for a comparatively short period of time during the busy season of the year. It is impracticable to furnish a separate house or building for these hired laborers, and, therefore, the common thing is for

the hired laborers to be assigned rooms in the family residence or sleeping quarters in some of the stables or hay barns. At the same time it is very customary for the hired laborers to sit at the table for meals with members of the family unless the number is large enough to warrant setting the table twice. Where only one or two laborers are employed, it is almost a universal practice for these one or two laborers to live in the homes with the resident farmers.

SCIENTIFIC FARMING

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The agriculture of the United States has passed through two definite stages of development and is now entering upon the third. It is profitable for the present purpose to review briefly this evolution.

As primitive agriculture exists it is known to the economist as the self-sufficing system; namely, each family undertakes to provide, year by year, sufficient food to last itself and its animals until the succeeding harvest. This system was inevitable in a new country, where practically everybody lived upon the land and was to all intents and purposes a farmer, and it is the system which prevailed until well into the lifetime of men still living.

With the increase of population and the development of manufacturing industries and transportation facilities, a large portion of the population began to devote itself to interests other than farming. This condition was necessary to the establishment of a market for agricultural produce and for the development of the second stage of agricultural evolution; namely, the money-making era. With the publication of each successive Census report we hear much about the decreasing percentage of those engaged in farming, as if it were a national calamity; whereas the truth is that if 100 per cent of our population had always remained in the country, there would be no market for the produce of the land, a money income from farming would be impossible, and agriculture would forever remain a family industry without returns beyond the bare necessities of living. In brief, it could never have risen from the self-sufficing stage to the money-making stage.

This money-making stage may be said, roughly speaking, to have begun with the Civil War, when the states from Michigan and Indiana east became wealthy in the production of wheat. This period was immediately followed by the development of the boundless prairies of the West, throwing upon the markets of the world

almost unlimited amounts of the cheapest beef and breadstuff that mankind has ever known. To be sure, it was all the time at the expense of virgin fertility, and the country has reaped the consequences, but the financial results were so enormous that the wealth of the states of the Mississippi Valley and the West may be said to have been drawn directly from the land; indeed, most of the bankers and merchants of the prairie states were first farmers.

The methods of procedure in this second stage of development were not very different from those of the first; namely, plowing, sowing and harvesting, which constituted the whole business of the farming so far as the land was concerned, and stock raising was little more than herding on the open range. The farmer of that generation was exploiting nature at a rate never before attempted. The havoc was terrific, but the wealth of the world was laid at the feet of men who acquired ownership of government lands either by homesteading or by the payment of a nominal fee of about a dollar and a quarter an acre. Men are yet living who acquired land in this way which is now worth two hundred and fifty and three hundred dollars per acre, enjoying not only this tremendous increase in land value, but large fortunes of personal property acquired from the soil during the interim.

In the meantime science was developing and laying the foundation for the third or scientific stage of farming, which we are just now entering with promise. As agriculture assumes this third and scientific stage in its evolution, the object is not so much the magnitude of production as it is the quality of the product and the economy of its production. The world could not long have lived under the oldtime destructive methods of agriculture, no matter how profitable they might have been temporarily to those engaged therein. The waste of fertility was too great. Lands that had been thousands of years in the making were ruined within a generation. Had those methods been continued, however temporarily profitable they may have been, the decline of the country would have been inevitable from sheer inability to wring sufficient sustenance from the soil.

Chemistry was the first of the sciences to turn its attention to agriculture, and the first two subjects studied were the scientific feeding of animals and the food requirements of crops. By the new methods of investigation devised by the scientist, it was speedily

discovered that the old feeding practices, while securing results, were yet enormously wasteful in that the rations were sadly unbalanced so far as the requirements of the animals were concerned, resulting in corresponding losses in food value. The result was the devising of a "balanced ration," which very nearly corresponds in its component parts to the real needs of an animal for nourishment and thus avoids the wastage of the surplus, particularly of the more expensive nitrogenous foods.

Turning his attention to the soil, the chemist found correspondingly wasteful practices. To be sure the farmer had learned through experience generations ago that manures and other fertilizers would increase the growth of crops, though he was about as particular to apply soot and other carbonaceous material as he was to apply the really effective fertilizers. The chemist quickly discovered that of all the elements necessary to the growth of plants only three need ordinarily to concern the farmer. Of these, nitrogen is enormously expensive, costing in the markets of the world some fifteen cents a pound, and as at least four pounds are required for a bushel of wheat it was evident that the wheat supply of the world must have been produced at wholesale expense of natural nitrogen. The scientist did not rest until he discovered, through the agency of bacteriology, that the valuable nitrogen could be captured from the atmosphere, whence it originally came. This fact was probably the most notable contribution which science has ever made to the progress of agriculture and, so far as we can see, the most notable it will ever be able to make. The dependence of man upon atmospheric nitrogen brought into form for plant use is beyond the power of comprehension.

Following "The Origin of Species," published by Darwin in 1859, and almost a generation of discussion, particularly among the theologians, the facts of evolution became well established and recently they have resulted in laying the foundation for rational methods of animal and plant breeding by which the systematic improvement of plants and animals and their adaptation to the needs of man are assured at a far less expenditure of time than heretofore and without the production of so large a proportion of worthless individuals.

An early field for scientific investigation was that of diseases, first of animals and afterward of plants. Indeed it was while work-

ing in this territory that some of the most important discoveries have been made, particularly concerning parasitic infection. The result of all this investigation has been the saving of enormous numbers of animals and of large acreage of plants by precautionary methods, such as quarantine, disinfection, etc., though the direct treatment of individual animals is generally inadvisable for economic reasons.

It is almost needless to remark that with these developments in the domain of agriculture much that was formerly tradition and superstition has begun to pass away. How recent it has all been, however, is shown by the fact that men still live who plant their seeds and kill their meat with reference to the phases of the moon, who treat "hollow-horn" and "wolf in the tail" by incantation, who put a red-hot horseshoe into the churn to drive the witches away, and who castrate only when the sign is right. While instances of this kind can still be found, it is yet true that the great masses of farmers to-day, even in the remoter agricultural districts, have caught the scientific spirit; and most of the material that now goes to constitute the revised agriculture of the twentieth century rests upon well established facts. So true is this that no man in these days can get a hearing anywhere upon any matter which does not rest, or at least seem to rest, upon experimental knowledge.

We have not yet reached the end of this development. We may be said to be just now in the very beginning of sanitary science regarding the operations of the farm. A man must do more now than to produce his milk or butter; he must produce it in a way which will assure the consumer that he is not taking communicable diseases in the milk, which is a kind of universal culture medium for everything which comes its way. It is this fact which has so notably raised the cost of city milk and is so appreciably reducing the mortality of infants.

Economics is perhaps the last of the sciences to reform the practices of agriculture. In the Far West it has taken the form of co-operative marketing, rendered necessary by the long expanse of mountain and desert over which fruit must be transported to reach the Eastern markets. In this way the last vestige of extreme individualism on the farm is being obliterated. What the passing of this individualism may mean so far as independence and the development of personal initiative are concerned, only time will tell; but one thing is clear—that as the facts in agriculture are developed by

scientific research, the truth stands out that the business of food production, to some extent at least, must be organized and conducted around larger units than that of a single farmer and his family.

The "organization of the farm" is a scientific conception of the most recent development. So long as wild lands could be had for mere occupancy, a farmer could get nothing out of his business but the bare return for labor; his land could have no value and there could be no investment except a slight one in implements and animals. Now, however, when the public domain is practically exhausted, competition for land will raise its price, food values must go up, for the farmer must realize income on capital as well as on labor, and his business is gradually assuming the form of other capitalized industries. This puts a new economic phase on agriculture and the whole question of how to organize and conduct a farm is a new one in economic science, as it is in agricultural practice. We still await its solution. Indeed, its serious study has only just begun.

The universal extension of agricultural education may be said to be the direct result of the development of scientific agriculture. There is little in mere handicraft that can be taught; it must mostly be acquired by experience. It is only when a subject has reached the scientific stage that it becomes teachable through the elucidation of the principles involved. Because of the ease and speed with which certain of these principles can be learned, and because of their immediate and far-reaching effect, particularly upon the permanence of agriculture, the demand is universal that the subject should be taught in as many of the schools as possible. The economist readily sees that the oldtime wasteful methods cannot prevail; that if we are to have a permanent civilization we must have a permanent food supply; and this must depend not upon practices that gradually impoverish the land, but rather on those scientific procedures which leave it each generation a little better than before in order that it may meet the demands of an increasing population with a more highly developed civilization.

This then is the aim and purpose of scientific agriculture: to replace tradition with well established facts; to substitute for the irregular and uncertain purposes of the individual a systematic and well organized business of food production by the community at large; to further adapt our domesticated animals and plants to the

purposes of man; and to stop forever that reckless depletion of the power of the soil to produce, which will not only fix a low limit to the population of our country, but so weaken the constitution of the people as to lay the foundation for disease. It aims, too, to establish in these early and prosperous days, through education, such standards of living as shall prevent the coming of those hard conditions which have descended upon such races as have surrendered themselves to the mere business of getting a living on worn-out soil.

GOOD ROADS MOVEMENT

BY HAROLD PARKER,

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There appears to be no doubt that the automobile, as its use has developed in this and other countries, has given an impetus to the improvement of the condition of highways and roads during the last few years that nothing in the history of highways has equaled or even approached. It is in a large measure due to this that the subject of good roads is absorbing so large a portion of the public attention, and which gives so strong an indication of the general interest in the Good Roads Movement. It should, however, be realized that the attention given to this subject is, in itself, not to be regarded as a safe guide to the action of public bodies for the reason, as in all questions of this sort, the determination of the people overreaches itself and takes action before wise counsel can be adopted. Therefore, many steps have to be retraced before a safe and sound solution of such a vexed question can be reached.

It does not seem necessary to point out that the development or evolution of the transportation question has been one of very slow growth and has followed generally the evolution of the people themselves. It has often been stated that the condition of the public roads in any civilized community was a measure of the material standing of that community, and undoubtedly, to a certain extent, this is true, but it is still more true that communities or assemblages of communities do give their attention to that matter which presses most earnestly upon their material progress, even if by so doing the refinements of civilization are left in the background.

In the United States, which covers a territory so large that practically all the countries of Europe might be contained within its borders, the consideration of the location, construction and maintenance of public roads as a scientific problem has been subordinated to more immediately pressing considerations. The fact that this vast area has been uninhabited by civilized beings until within comparatively recent times, and that its exploration, settle-

ment and development have been phenomenally rapid, has brought about a condition of political and social affairs that has never previously existed in any other country. In short, the process of development towards civilization in the old countries of the world has been accompanied by a parallel development in its means of transportation; whereas, in this country, which was settled by colonists, who brought with them all the inherited civilization from the country which gave them birth and thrust them at once into a continuous struggle with savage nature and savage men, the relative importance of their surroundings immediately became very different from what had existed previously, and so a distorted relation was created and their lines of evolution changed.

The transportation problem, as it first presented itself to these early settlers, was solved by the use of the ocean, river courses, and afterwards by the construction of canals which connected these waterways. By degrees roadways took the place of trails, which led gradually farther and farther into the wilderness, but their relative importance never took the same ground as it had in Europe. There the transportation of armies and munitions of war had brought the question of transportation very forcibly before the governments of those countries, while here it simply meant the easiest and most unscientific means of communication between small settlements and their market, or to the nearest point on the rivers or upon the seacoast.

As the agriculture of the country, as well as its mechanical and industrial products increased, a gradual improvement in the roads outlined above took place, but as I have indicated, never did they show the relative importance that they had in other countries. If it had not been for the invention of the steam engine, it is difficult to see how this great country would have reached its present state of progress, except after many years of slow development. The fact, however, that rail transportation became effective at this critical point in our history, has not required an answer to this question. The railroad system, as it developed in the United States, answered the needs for many years of other means of transportation, except for the short distances that existed between the farms or the factories and the railroad station.

The history of the growth of the railroads of the United States is probably the most surprising industrial development in

the history of the world, and to-day more than half of the railroad mileage of the entire world is within the limits of the United States. Not much over fifty years ago, the whole of the Middle West was an undeveloped region and if, instead of railroads, we had had to depend upon the ordinary wagon road as it then was and, in most cases still is, how much do you think of that wonderful human prosperity seen everywhere through this region would be in existence to-day? The extraordinary initiative and courage of a comparatively small number of railroad men and those who controlled capital, thrust the line of steel into the wilderness and cities and towns grew up as if by the hand of magic.

I am attempting to point out the difference in conditions of transportation and its relation to the people themselves between this country and the older civilized nations of Europe, and how, from the very nature of things, the present unsatisfactory condition of our highways is not so much a demonstration of our lack of civilization, as it is an evidence that our efforts have been turned towards the solving of problems more nearly pressing upon our well-being. It is fair, therefore, to say in extenuation of the present conditions, that although the roads of the United States may be, as a whole, the worst to be found in any civilized country, it is because our attention, our resources and our brain have been absolutely absorbed in turning a wilderness, 3000 miles in width, into the most prosperous country in the world both in wealth of product and in political freedom and advancement. It is only within a few years that the less densely populated areas have felt the need for improvement in their highways, although it is true that in the older portions of the country a more or less careful study of roads and streets and highway bridges has been made and has, in a measure, kept pace with that of other countries; it is, nevertheless, true that never in the history of the United States has there been such a thing as a consistent system, either for the location, construction or maintenance of the roads and highways, even in the older portions of the country.

It is a reasonable assumption that the people of the United States will in time as effectively and efficiently solve a problem of this importance and magnitude as they have solved other problems which seemed more overwhelming in the past, and it is plain enough that the present intensity of public interest on this subject is so

concentrated and insistent that the solution of this question must be solved, and although in the process we may spend many thousands of dollars in vain, and lose much valuable time, the final adjustment will be in accordance with reason and economic value.

It was suggested at the beginning of this article, that the automobile has probably done more to give impetus to this movement than any one thing. The automobile would not, however, have been able to produce this result if the people themselves had not been ready for the question, and the automobile is merely an incident.

The Good Roads Movement, which is filling so large a portion of the horizon at this moment, undoubtedly carries with it elements of danger, similar in effect to the danger that attends any great public movement. When the minds of the great mass are moved towards one end without direction or control, it involves the expenditure of money unwisely, and many acts which have to be reconsidered, and this largely because the actions were taken without proper preparation. This danger no doubt lies in a large measure in the public sentiment expressing itself in the desire for a result, without consideration of the way to produce that result, or of the unconsidered demand by the masses which affects the political situation and the minds of politicians. The governing bodies, whether state or national, being composed of many individuals, and the sole responsibility not resting on any one, do not seem to give sufficient weight to their responsibility, both as to appropriating money and to its wise expenditure. The members of these bodies, pressed by the insistent cry of their political supporters, will make available public funds without having digested any plan for their wise use.

At a meeting recently held in Richmond, Virginia, at which those interested in this subject met for the purpose of discussion and also for the purpose of pushing along this cause, it was sufficiently evident that the demand for federal aid was to be considered as a national issue and many politicians, as well as those who were not politicians, most vehemently urged this policy and demanded it of their representatives in Congress. Not one of them, so far as I could learn, had even considered a feasible and reasonable way of spending the fifty million dollars which they insisted upon as a Congressional appropriation.

If this proposition had been seriously considered, would they not realize that fifty millions of dollars is a mere drop in the bucket toward the construction of any system of national highways? And that, without intelligent supervision of trained and educated road engineers, the expenditure of this sum, or any other sum that Congress might appropriate, would be made without beneficial results, even to those who were most nearly affected?

Many plans have been suggested by members of Congress in the shape of bills presented in their respective houses, which appear to me to have been formulated mainly to satisfy the clamor of the voters who were their supporters, but which upon intelligent consideration appear to have little foundation in reason or merit. There have been, however, certain well-considered plans which embody a scheme for national highways, and which define the location and scope of a national highway system under a particular branch of the United States Government, and which suggest plans of location with greater or less detail, and which, if wisely carried out, would not only create a scheme for a national system of highways, but would also provide a school for the proper education and training of road engineers. This would be of vast material benefit to the country. It would also have the effect, properly executed, of affording a standard method of construction and maintenance over the entire country, that would approach the present admirable system so long used in France.

It does not seem to me to be susceptible of argument that a question involving so vast an interest and so tremendous an expenditure of money as this, or any other plan, would involve, should be acted upon by Congress without the most careful thought both as to the ultimate cost and the economic way of bringing it about.

The bills so far presented in Congress, and there are many of them, provide for the expenditure of sums ranging from a few millions to a hundred million dollars, or even more, to be divided among the various states as national aid to those states by the National Government. The amount and location would probably be determined largely by the political skill of the individual members of Congress; this would undoubtedly produce a condition of chaos that would be a source rather of shame than credit to the people of the country. How much wiser would it be for Congress to refer the

consideration of the whole question to the President of the United States with the authority to appoint a commission which should give the entire matter the most careful and exhaustive study and examination, and render a report of its findings with recommendations for legislation.

The insistence of the public for a more reasonable system of public roads has produced, in many states, laws which have created highway commissions with greater or less power and responsibility. These commissions are composed of men selected by the various state governments, and are of varying value, according to the wisdom and sincerity of the appointed powers. All these officials are, however, badly handicapped because there are so few trained road engineers in the United States, except as they have been developed by the commission themselves. The result of course is that, in some states, satisfactory results have been brought about and some approach made to a practical system by regular and studied method, but in most states, the expenditure of the public funds is without lasting benefit to the public.

It is impossible, under any existing condition in the United States, to make sure of any consistent improvement. We have no technical school for training such engineers, except as courses have been introduced in small ways in certain universities. Columbia alone, within the year, has introduced a graduate school of highway engineering. We have no present standard of method or administration throughout the length and breadth of this great country, and no well-digested methods except at isolated points.

Up to the present time in the United States, as I intimated in the first part of this paper, the efforts of our greatest minds have been directed wholly to the material growth of the country at large, and have not centered themselves upon the problem of highway science. The tremendous present demand will undoubtedly enforce the attention of greater intelligence than has yet been used, and there is no doubt in my mind that an adjustment will take place, which shall be to the advantage of all. This cannot be done, however, by following the undefined paths suggested in the oratorical efforts of public speakers whose ambition seems to be to excite the assuring applause of an unconsidering crowd.

From the British Northwest to the Gulf of Mexico, and from Nova Scotia to Southern California, the cry for better roads is

heard on every hand. States and territories and colonies, counties and cities are issuing bonds and are borrowing money for the specific purpose of building roads, and among them all hardly a single one can furnish men properly educated and trained to spend these tremendous sums economically or properly. There are no men in America, with very few exceptions, whose technical education fits them to build roads, and those who are fitted by experience, are generally experienced only along certain lines which come within the scope of their particular work. It may not be generally appreciated, but it is, nevertheless, a fact that it would be almost impossible at this moment to select a force of road engineers in this country, fitted to take charge of the construction and maintenance of a National System of Highways of the kind and character which our Government could properly undertake. The demand, therefore, for a proper and systematic training of such officials along lines similar in character and scope to those practiced in the French School of Roads and Bridges, is imperative, and is more urgent from my point of view than the appropriation of money until we have learned how to spend it.

I think that the public mind should, so far as is possible, be directed along two lines of thought before it is allowed to so far act upon political sensibilities of Congress as to produce actual results. These two lines of thought are: First, to determine how to spend the money that it is proposed to appropriate, and, second and incidental to the first, how to produce men trained to take charge of such expenditure, and this is intended to apply to local and state considerations as well as national.

These two points seems to me to embody the entire issue as it is raised by the Good Roads Movement.

CO-OPERATIVE MOVEMENTS AMONG FARMERS

By E. K. EYERLY,

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Co-operation, as applying to agriculture in the United States, is a term of various meaning. In its stricter sense, it generally implies a business association in which one and only one vote is given to each member, capital is supplied by the members and is paid only the current rate of interest, and profits are distributed to the members according to the amount each "sells or buys or supplies." The unit of organization is the man; the association is an organization of men, and not primarily of a certain number of capital units. In this sense the term is understood commonly in Europe, but much less commonly in the United States. Here co-operation frequently implies a joint stock company in which capital often participates in the profits and the voting is by shares, although some limitation is usually placed on the number of shares that any member may own. Again, co-operation may imply simply a more or less temporary organization for the purchasing of goods at wholesale prices, testing cows for tuberculosis or butter fat, or the accomplishing of almost any other common purpose.

The doing of business together co-operatively has frequently been hailed by students of our competitive system as a remedy for many of our social ills. J. S. Mill believed it might prove a great boon, particularly to the hand-working classes. Professor Cairnes agreed with Professor Fawcett that "we may look with more confidence to co-operation than to any other agency to improve industrial conditions." In our own country a good many distinguished scholars like Professor Ely and Dr. Albert Shaw have written enthusiastically of this humble and often despised agency. But notwithstanding this eminent laying-on of hands, co-operation in the United States is often thought of as the work of impracticable dreamers. Their efforts as related to agriculture are regarded chiefly as a series of colossal failures beginning with the transcendental Brook Farm and ending, for the most part, in the late '70's

with the collapse of gigantic Grange schemes that embraced even international trade. The truth is that agricultural co-operation, or business co-operation of any kind, if judged solely by its history in this country up to within the last two or three decades, has generally not acquitted itself worthy of its sponsors.

In 1888, at the time the Johns Hopkins University Studies gave us the History of Co-operation in the United States, there remained probably only a few thousand co-operative societies out of the many thousands that had been earlier formed. In contrast with this showing is the situation to-day. An investigation made by the United States Department of Agriculture in 1907 discovered in this country at that time about 85,000 agricultural co-operative societies with a membership of about 3,000,000, not including duplicates. In these societies are represented one-half of the farmers of this country. "The fraction is much larger," says Secretary Wilson, "if it is based on the total number of medium and better sorts of farmers to which the co-operators mostly belong." The number of societies engaged in each of the principal kinds of co-operation is given as follows: Irrigation, 30,000; insurance, 15,650; telephone service, 15,000; buying 4,000; creameries and cheese factories, 2,400; grain elevators, 1,800; selling 1,000. The causes that have led to this great increase in numbers in recent years are numerous and are of sufficient consequence to be taken up in some detail. Among the most important are probably experience of earlier movements, organization in other industries and the great success of co-operation in Europe.

Some lessons were learned from past success but probably more from past failures. Scattered here and there were successful societies organized on business principles, animated by a truly co-operative spirit and understanding the competitive forces with which they had to contend. Many others, however, looking upon the middleman as their arch enemy and determined to strike him a quick and fatal blow, chose one of their own number to perform his functions, but in so doing frequently aroused so many local jealousies and made so many business blunders as to insure their own defeat. Co-operative experience had, nevertheless, a sobering and clarifying influence upon both the co-operator and the middleman. Through the rapidly improving and more generally utilized agencies of communication and transportation, farmers came to have

a better understanding of the principles of the more successful societies. Other societies while nominally unsuccessful had yet caused the middleman in his struggle for self-preservation to lower his prices very greatly. He had, for example, been obliged to reduce the price of reapers from \$275 to \$175; of threshers from \$300 to \$200; of wagons from \$150 to \$90; sewing machines from \$75 to \$40. Potential competition from the co-operators was able to keep permanently low prices that were intended to be so only temporarily. The co-operators, too, came to see in their conduct of a creamery, general store or other business that middlemen were not always the exploiters they were imagined to be.

Another influence making for the development of co-operative societies has been the organization of labor and of capital. Laborers by pooling their interests were seen to be able to control somewhat their labor supply with reference to a given market and to force up their wages by collective bargaining. Capital was notoriously being assembled into great trusts with power to influence greatly the prices of products that the farmer had to sell or of the goods that he had to buy. We need only call to mind what has been public opinion regarding the power of the so-called meat trust, harvester trust and lumber trust, and the power of some of these over transportation companies, in order to realize their influence in crystallizing business thought among the more intelligent farmers. The more recent organization of middlemen in many large distributing centers has also hastened the getting together of the farmers.

Still another influence on co-operation in the United States has been the recent marked success of this form of business organization among farmers in most European countries. This has been especially notable in Germany, Denmark, Italy and France during the last three or four decades, and in Ireland still more recently. Immigrants from these foreign countries, either because of their co-operative experience or because of their acquaintance with co-operative movements abroad, take kindly as a rule, to this form of business. Such is strikingly the case in the Middle West where the co-operative creameries and elevator companies abound. The only successful co-operative stores organized in New England since 1880 have been, with one or two exceptions, among foreigners.

In this connection it may be noted, too, that in those parts of the country into which there has recently been a considerable influx

of interstate immigrants, as in the Pacific coast states, in Texas and in certain other parts of the South and the Southwest, the co-operative movement has rapidly developed. While this is due probably in part to the intensive and specialized agriculture practiced and to the nature of the crops grown, *e. g.*, fruits and vegetables, it is due also in part to the transplanting of individuals into new social groups in which the "cake of custom" is likely to be broken up and new adjustments made under some intellectual leadership. "Necessity" is often rightly said to be the mother of co-operative invention, yet, while success has come to the fruit grower of newly-settled Oregon or Washington, neglected orchards often attest the failure of fruit growers in New England, even though soil, climate, and markets may be in their favor.

Leadership in co-operation in the United States has not been taken by any one person as it has been by Raiffeisen in Germany, Dr. Wollemborg in Italy, or Sir Horace Plunkett in Ireland—men who were not primarily farmers but far-seeing philanthropists or statesmen. This explains perhaps why we have not in America a co-operative movement instead of many independent movements.

One of the earlier forms of co-operation which has survived and which has in the last quarter of a century greatly increased its operations is that of insurance. There are two general forms of co-operative insurance societies. One is patterned after the old line companies in which a surplus is accumulated by the payment of fixed premiums at the time of insurance to cover future losses. The second type has no fixed premium and carries no reserves. When losses occur assessments are made to cover them. The only fixed charge is to cover running expenses and is paid at the time the risk is taken. The Grange has organized for its members a good many successful mutuals of this latter type. In Pennsylvania, for example, there are a dozen such societies carrying risks of about \$30,000,000. The secretary of the State Grange writes that "some of these societies have been doing business for more than thirty years and the average cost has been but little more than one-third of what cash companies charge for the same service." The only paid officer is the secretary who gets a small salary.

Outside the Grange there were in Pennsylvania in 1906 about 260 mutual societies carrying risks of nearly a billion dollars, and paying losses for that year of more than two millions. Iowa,

Illinois and Wisconsin have each nearly as many mutuals, while Minnesota, Ohio and New York are also well represented. As a rule insurance in these companies is to be had at considerably lower rates than in the old line companies. Professor V. N. Valgren estimates that the mutuals save the Minnesota farmers annually \$750,000.

Co-operative telephone companies are striking examples of the good that has come to farmers through collective effort. The difficulties to be overcome in the starting of these companies often developed considerable initiative and community spirit. A few neighbors, sometimes by drafting into service their barb-wire fences, would organize a small independent circuit, with possibly the village storekeeper in charge of the switchboard. As the circuits would enlarge and connections with the large outside companies would be attempted, great obstacles would sometimes be encountered in the form of a demand to pay high rates or occasionally to give up their independence. Such a case the writer, as chairman of a committee in charge of a small municipal telephone plant, well remembers because of his many conferences with some Norwegian farmers who desired to connect with the city plant by way of a small switching station of a large company, but were for many months prevented by it from doing so. The obstacles in their way were the very agencies necessary to awaken in them a strong neighborhood consciousness and to give them effective fighting spirit. Many of the mutual companies have the opposition of large consolidated companies to thank first for their local organization and later for their connection with a network of independent companies extending over a large part of the country.

In the local companies usually each member owns his own telephone and contributes equally in work, material or money in the building of the plant. In not a few cases the members become familiar with the mechanism of their "phones" and are able to dispense largely with the services of professional workmen. The rates charged are usually very low, often only a half of what is charged by private companies.

As a social agency their influence has been incalculably great. Questions of weather reports, market quotations, labor assistance, medical aid and social gatherings have been much simplified. The former isolation and consequent loneliness of the farm home is

no longer possible with neighborhoods united now by these nerves that pulsate with life. The telephone circuits of many of these mutuals are to be classed along with the school district or the township as a means of social grouping.

Another interesting type of co-operation is the co-operative store organized and supervised by the Right Relationship League. This League incorporated in 1906 has organized chiefly in Minnesota and Wisconsin about one hundred successful stores on the Rochdale plan that has been so successful in England. The Pepin County Co-operative Company in Wisconsin, with nine retail stores, did a business amounting to about \$230,000 in 1909. Distinctive features of these companies are that in starting into business they try to buy out rather than force out existing stores, make use generally of expert accountants of the League, and support a wide-awake journal devoted to their interests. The combining of educational features with democratic government and business methods ought to lead to the avoidance of some pitfalls that have been the ruin of many a co-operative store.

The crowning success of co-operation in the United States is found in connection with the raising and marketing of fruit. This success is favored by the specialization of fruit growing in certain localities, by the intensive methods used and by the frequent dependence of the industry on irrigation—itself largely a co-operative enterprise. Especially in the Rocky Mountains and Pacific coast regions do we find highly developed and enthusiastically supported co-operative societies engaged in the gathering, packing, shipping and marketing of such fruits as oranges, lemons, apples, peaches, pears and small fruits. Such societies are, however, widely distributed, being found in nearly every large fruit-growing region of the country.

The objects are such as can seldom be attained by small growers acting alone. The principal aims are to take advantage of lower rates for large shipments, to get better accommodations in way of fast freight, refrigeration and the like, to obtain information by telegraph of the needs of the various markets so as to prevent gluts, to secure better storage facilities, and to standardize the fruit to be sold by establishing brands and uniform methods of harvesting and packing.

The fruit-growers' union is generally organized on the demo-

cratic principle of one man one vote and equal contribution of capital, or on the principle of voting power and capital contribution according to the acreage of the crop. The members choose a board of directors who in turn select the most important officer, the business manager. On his tact in securing the confidence and co-operation of the growers and on his ability to market their product successfully depend very largely the welfare of the association. Such a man in some of the larger societies commands a salary of \$5,000 or more.

The business is done on a cost basis and the benefits are shared by the members in proportion to their patronage or the use they make of the association. Membership usually involves a contract that gives the association the right, under penalty for violation, to sell the whole of the marketable crop of each grower as well as to control its methods of preparation for the market. The handling of the fruit of outsiders is generally found to be dangerous because of the liability of introducing lower standards.

There are two distinct methods of packing the fruit. In one case it is done on the premises of the grower, and his fruit is inspected at the shipping station. In the other case it is done in central packing houses owned by the association. The picking of the fruit, especially of small and perishable fruit, is generally done by the grower. A better practice for the picking of such fruits as apples and oranges is to have trained gangs of men do this work for all of the members of the association. By this method the grower's ability to detect blemishes in his own fruit is not put to the test, and, what is more important, there results less bruising of the fruit, which is the chief cause of decay.

Formerly the fruit was sent to middlemen and sold on commission, but now much of it is sold f. o. b. shipping point or is consigned to the companies' own agents. A form of marketing growing in favor is the selling of fruit at auction in large distributing centers. Prior to the auction, the various consignments are catalogued and samples of the fruit are conveniently displayed for inspection. As the prospective buyers, who are principally retailers and peddlers, are furnished with catalogues and allowed to buy in small lots, a lively competition ensues. Where this form of selling is practiced the consumer is more likely to be benefited as to price than where he is still farther removed from the producer.

Many of the benefits of co-operative sale are indirect. Any change in the consumer's fancy as to variety or color of fruit or size or form of package, is quickly learned by the manager and communicated to the members. There is likely also to be a free interchange of knowledge as to the best methods of growing any particular fruit, as well as to its adaptability to any particular soil. Among the growers there arises frequently a considerable rivalry as to who shall produce the largest proportion of the best grade of fruit. Inasmuch, too, as every grower has an assigned number that is marked on every box or crate of his fruit, and each package is usually guaranteed by his association, he is held by local opinion up to a certain standard of excellence.

The associations frequently purchase for their members supplies such as box shooks, wrapping paper, spraying material, hay and household provisions. The Grand Junction Fruit Growers' Union of Colorado, for example, in 1906 bought 224 carloads of such supplies. In this connection it may be said that associations by employing their laborers in the making of crates and boxes during the slack season are able to keep a class of skilled laborers the year round. In order to understand the experiences that an association often passes through, a short account may be given of the early stages of the California Fruit Growers' Exchange—the largest and most successful organization of its kind in this country. Before the early 90's the citrus crops in California were generally remunerative. But good prices stimulated production until the supply apparently outran the demand, although the production then was little more than one-tenth of what it is to-day, with no great fear now of overproduction. The situation proved to be a profitable harvest for fruit buyers and commission men in the large cities where much of the fruit had to be marketed. In consequence many orchardists furnished their entire crop for nothing. In 1892 many a shipper received "red letter" returns showing himself indebted for freight and commissions in excess of the proceeds from the sale of his fruit. Growers who sold their fruit outright at the local shipping points often fared but little better, since they found themselves at the mercy of buyers sufficiently organized to dictate prices.

Under the circumstances it was natural that citrus growers should look for some means of escape. Co-operation on a small

scale had been tried in a few places with more or less success. When it was proposed that all of the growers of citrus fruit unite and sell their products through a central agency there was general enthusiasm. But here we meet with certain uninviting traits of character that co-operation has struggled with to improve. Some growers who pledged their crops to the association yielded to the seductive offers of buyers who were unwilling to allow their trade to slip away from them without a struggle. In a few cases lawsuits were necessary to bring a few pledgers to a realization of their obligations. But aside from these mercenary traits, which bear a strong family resemblance in all business, there were manifested unlovely qualities that sprang from ignorance and suspicion. Ignorant persons easily imagined that the matter of ascertaining marketing conditions, of establishing commercial relations with responsible buyers and of directing the sales of a society's output was something very simple, and that consequently their managers and other expert servants were being overpaid. Suspicious persons sometimes believed that their managers were promoting the interests of a selected few by showing partiality to them in grading their fruit, in selecting their market and the like. That such natures have so far been disciplined as to lead about seventy-five per cent of all the citrus fruit growers of California to work together successfully for more than fifteen years speaks well for the moral influence of co-operation.

To-day these growers are united into eighty local groups for picking and packing their fruit, while the central organization markets an annual product worth about \$15,000,000. The exchange keeps its agents in all of the principal marketing centers of this country and Canada, with one in London—there being about seventy-five altogether. Financially the exchange has been very successful. Besides being obliged to pay only a little more than half as much per box as formerly in getting their fruit on the market, the co-operators have been receiving the best possible prices because of their highly organized system of keeping constantly acquainted with the consumer's needs and distributing the supply accordingly.

What has been said regarding fruit growers' unions might be repeated with some modifications regarding many societies formed about such farm products as onions, potatoes, tobacco, tomatoes, celery and melons.

Among the causes of failure of many companies may be mentioned individualism, conservatism, jealousy, poor business management and a lack of knowledge of what other societies are doing. This last fault is being remedied where associations like the farmers' elevator companies are disposed to come together for further organization among themselves. Another cause of failure is the stock company form of organization in which there is but little restriction on share voting or on the number of shares owned. This is exemplified by some co-operative creameries. Dr. James Ford, of Harvard University, finds that only about twenty-five, or one-fifth of all the co-operative creameries of New England, are of the purely co-operative type. In the stock companies the large shareholders are tempted constantly to increase the dividend rate on capital at the expense of the other patrons. This may explain in part the difficulty of the co-operative creamery in New England to hold its own and may also be one of the weaknesses of the Western associations in their struggle with the "centralizers." Many societies also complain that legislation is not favorable—few states having suitable laws for purely co-operative societies.

Co-operation is also in need of wise leadership and organization. The Society of Equity and the Farmers' Educational and Co-operative Union of America are attempting to organize farmers on a national scale and both have done a great deal to awaken farmers to a need of collective effort. But in so far as they endeavor to fix minimum prices for such commodities as corn and cotton and to establish monopoly conditions they enter upon a questionable mission.

The chief significance of co-operation among our farmers is possibly not that of economic gain. While the economic motive has been dominant in the organization of these societies and has been fully justified by the generally satisfactory money returns, yet possibly more important has been the co-operative influence upon the farmer as a man and a citizen.

In this respect our co-operative societies generally have not attained the success reached by most of the European societies. Few of our associations can boast of the "co-operative character" so general in Denmark. Fewer would agree with some priests and clergymen in Germany that "the co-operatives" had done more for the morals of their communities than had the churches. Still fewer

possibly would agree with the president of the Co-operative Congress in 1910 that "the great function of co-operation is to create co-operators." And yet many of our societies would assent to Sir Horace Plunkett's claim that there is much in the co-operative movement to commend it to the social reformer.

A questionnaire embodying this sociological aspect of co-operation was recently sent out by the Massachusetts Agricultural College to several hundred typical co-operative societies. As far as the answers received have been analyzed they seem to confirm the importance of this aspect of the subject. The older societies in particular lay stress upon the value of the "co-operative spirit"—the fellowship and loyalty that cause their members to stand together in adversity as well as in prosperity. Some testify that co-operation gives business training, promotes scientific interest in the quality, grade or variety of farm products, and begets a desire to make known to one another the processes or "secrets" of successful farm operations. Others speak of its aid in community efforts connected with good roads, telephones, schools, churches, legislation, law enforcement, beautifying farm buildings, allaying race prejudice, keeping girls and boys on the farm and giving stability to the business of farming.

Such results usually are not marked in new societies or in old societies not truly co-operative in form or spirit. But the older societies of the purer types are certainly proving themselves to be excellent schools for the development of new conceptions of community consciousness, occupational solidarity and of larger citizenship. That these societies are destined to influence greatly the attitude of their members toward many rural institutions can scarcely be doubted. What Professor R. H. Hess says of thousands of co-operative irrigation societies regarding their larger political aspects applies with little exaggeration possibly to many other societies: "The development of a high order of intellectual and administrative ability, which is the inevitable outcome of a generation of co-operation in irrigation production, will doubtless react upon government institutions, and the gift of prophecy is not necessary to foresee radical changes in the political life of the West."

IMMIGRANT RURAL COMMUNITIES

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The problem of the immigrant is largely industrial. Its essence lies in the concentration of incoming foreigners in urban and industrial centers, in the competition for labor and in the keeping down of the wages of living and the standard of comfort of the established workman. These problems and a host of others, social, political and moral, growing out of their congestion, poverty and ignorance of things American, have, until recently, had little or no apparent significance in the rural districts where foreigners have settled.

Nevertheless, the foreigner has played a very prominent part in the agricultural development not only of the great West and Southwest, but of New England. The lure of free land, unbroken, rich, suited to pioneers willing to undergo privations and hardships for the sake of landed property, attracted a steady, sturdy influx from northern and western Europe, which continued through the seventies and eighties but slackened somewhat by 1895, when the supply of free land began to be pretty well exhausted. In the upper Mississippi Valley rural groups or settlements of foreign-born are so widespread and frequent that a township of Bohemian, German or Scandinavian farmers excites no comment and invites no comparisons. They have improved the land, organized the agriculture, shaped the social institutions and influenced the political situation. Most of them are very thoroughly Americanized—at any rate they have become thoroughly imbued with the American spirit, have lost most of their distinctive race characteristics and are well recognized and permanently established elements in western rural life.

More recently, however, and perhaps more especially in the East, South, Southwest and Pacific coast, certain small compact communities of foreigners have been settling. They belong to the newer immigration, originating largely in southern and southeastern Europe, and they represent what may be denominated the

agriculturally doubtful races. Racially they are Slavs, Italians, Hebrews, Portuguese, a few Greeks, Belgians and some Orientals. It is of certain characteristics of these rural folk that this paper will deal.

The Federal Census of 1900 reported about nine and one-half million male breadwinners engaged in agricultural pursuits in the United States. Three-fifths of these were native whites, born of native parents, about one-sixth were negroes, and the remainder, some 2,100,000, were of foreign origin, *i. e.*, born of foreign parents. Taking no account of the Chinese, Japanese, Indians and other colored persons, the males of foreign lineage constituted in 1900 more than one-fourth (25.4 per cent) of all white males in agriculture—certainly an element to be reckoned with. Viewed from the standpoint of immigration, something like one-fourth of all male breadwinners of foreign parentage in the United States were engaged in agriculture in 1900. The occupational statistics of the census of 1910 have not yet been published, but they will certainly show an increasing number of recent immigrants entering rural pursuits; neither the absolute nor the relative numbers at the present time can be estimated with any degree of accuracy.

The United States Immigration Commission made a partial investigation of recent rural immigrants from southern Europe, and in the course of their study personally visited more than 150 immigrant settlements, representing many different forms of agriculture in nineteen states, chiefly along the Atlantic and Gulf coasts, where many incipient communities have recently taken root. Several colonies also, largely Polish or Italian, that have recently established themselves in the Middle West, were included in the studies of the commission.

In general, the groups are racially homogeneous. Moreover, as races they bear certain common characteristics of some economic significance. In the first place, although a large percentage of them were born and bred in rural districts abroad, comparatively few of them have found their way to the countryside in the United States; most of those who chose agriculture as a vocation became farmers immediately on their arrival in the United States. Second, as compared with the races from northern Europe, these foreigners are recent arrivals and consequently have not generally been able to acquire rich, virgin land free. Many have purchased older,

more or less improved areas, or the less desirable parcels rejected by earlier home-seekers. Third, these races are still on trial as agriculturists. They have not yet fully proved their fitness for American rural life. They are doubtful. Finally, while at present the farmers among them are relatively few in number, it is likely that our agricultural immigrants of the future will be largely recruited from the ranks of these races.

Seasonal Laborers and Permanent Farmers

The early rural immigrants who came from northern Europe and made a straight trail for the woodlands and prairies of the great West years ago, were almost invariably home-seekers. Most of them entered upon virgin land as soon as they reached their destinations; others, after a very short period as farm laborers and lumbermen, invested in wagons and teams, married and began life as land owners. From the beginning they secured a firm foothold on the soil, to which they clung tenaciously. Among the more recent agricultural immigrants one may distinguish three economic classes, differentiated by their relationship to the land. First are the seasonal laborers, those having places of residence and, perhaps, a principal occupation in the city, who spend a few weeks of each year in the agricultural districts performing certain specific tasks, such as hoeing, berry-picking, vegetable gathering or the like. The second class are the regular farm laborers as we know them, who usually become land owners. The third are the land buying, farm owning immigrants, the salt of our foreign farming communities.

With the extension of market gardening, small fruit growing, cranberry bogs on a large scale, vegetable canneries and sugar-beet cultivation, the demand for seasonal labor has greatly increased. The field of employment is frequently near centers of population; summer is the season, congenial to those who would live out-of-doors, especially favorable for the employment of school children and laborers out of work, because shops have shut down and schools are closed; in general, the entire family may find employment on the same farm or enterprise and greatly reduce the cost of living by subsisting on vegetables and paying no rents. Thousands of Italians, Greeks, Poles, Portuguese and others come in contact with the land and with the open country in this way.

The seasonal laborer has little opportunity to become an owner. He is the counterpart of the unskilled temporary laborer in industry, the day laborer on railway construction work. Specialized, capitalistic, large scale agricultural production demands efficient machines and often great gangs of comparatively cheap laborers. The cranberry industry, highly profitable when rightly managed, is absolutely dependent on an army of pickers, usually Italians, Portuguese, Poles or Indians, who can be employed for a short time during the harvesting season. Many of these laborers are aliens, laborers of the poorest sort with little ambition and few American ideals. They are frequently birds of passage, caring naught for agriculture nor rural life nor American citizenship. They serve only to make agriculture profitable to the enterpriser. Between them and land proprietorship there is a great gulf fixed, across which very few are able to pass. Careful inquiry discloses that very few seasonal farm laborers find encouragement to become owners of farms. This class of rural immigrants is the least satisfactory from any point of view, economic, social, political or moral.

The immigrant farm hand, the regular farm laborer employed by the year or the month, gets somewhat more closely in touch with the soil and with American ideals. Thousands of newcomers, fresh from their native shores, have engaged in and are finding employment on immigrant and American farms, learning the rudiments of American farming, acquiring American methods, getting a grip on the English language and saving American dollars to purchase American land. The farm laborers of New York and New England seem to be chiefly Poles, Italians, Portuguese, Canadian French, and a few other foreign-born. They are seldom wholly satisfactory farm laborers, but there is no other really available source of supply. A surprisingly large percentage of them come to love the soil and in a few years acquire some land, purchased out of their earnings. This is markedly the case where the farm laborers are newcomers of the same race as their employers.

Permanent Rural Groups

Of the somewhat more than one hundred and fifty rural communities visited by agents of the Immigration Commission, more than forty were Italian settlements. The largest, oldest and most important of these in the East are established on the sandy pine

barrens of southern New Jersey. Here perhaps seven thousand persons of foreign lineage have found permanent homes. The forbidding nature of the infertile waste of sand, swamp and woodland which characterizes the New Jersey barrens has prevented their occupation and improvement by Americans. Here and there a few poor native farmers have cleared small areas and carry on an inferior sort of agriculture, eking out their incomes by the sale of wood or low-grade timber. Three decades or more ago it was discovered that small fruits and berries could be produced profitably on newly cleared virgin land; a few Italians were induced to settle; others came to pick berries and, because land was cheap, remained to raise them; still others gathered about the first nuclei at Hamonton and Vineland, purchased small farms, cleared them and raised quantities of excellent berries and grapes. Over a limited area they have literally turned a desert into a garden. Their small holdings of five to thirty-five acres are well cultivated, planted to peaches, grapes, strawberries, raspberries, blackberries and sweet potatoes, and present a lively illustration of small farming with a specialized money crop on the Atlantic seaboard.

About two decades ago berry-growing was very profitable in southern New Jersey, provided one was able to procure a supply of cheap labor. The Italian was able to compete for berry land because of his large family, willing and able to aid him from clearing to harvest, because of his low standard of comfort and his capacity for incessant manual toil. Moreover, several shops and factories gave opportunity for immediate earnings, a fact of considerable importance where land is uncleared and not immediately productive. When the land was new and profits easy a good many Americans raised berries in competition with the Italians. More recently, however, successful berry-growing has depended largely on careful tillage, hand culture and fertilization, and many of the Americans have sold out to Italians, alleging their inability to compete with them successfully.

In these communities both North Italians and Sicilians are represented, and both have made efficient farmers and responsible citizens. The community is still in the making. Here are the recent arrivals, foreign in dress, speech and conduct. They have settled on small parcels of land and are deeply in debt. The men work in the brickyards, the glass works or as common day laborers, while

wife and children care for the berry patch. Living in the better houses on the larger holdings are the older immigrants; they have passed through the long hard days of debt and pioneering, have improved their holdings and purchased more land, have built good houses and are recognized as respected members of the community, perhaps American citizens.

There is still another class, the American-born Italian. Raised on American soil, familiar with berry farming from childhood, many of them alert, active, intelligent, progressive, they are the choice fruits of American immigrant rural life. Up to the present these young men and women manifest an inclination to remain farmers. They take an active interest in community life and the business of agriculture. They are fairly prosperous, their educational, social and economic standards are higher than their parents', they are good citizens and trustworthy, and many of them are proud of their profession.

The basis of a wholesome, happy rural life is economic prosperity. Where the returns from agriculture are inadequate, it is fruitless to look for adequate social, recreative or educational institutions and enterprises except in rare instances. This truth is especially demonstrable in Slavic or Italian communities. That the New Jersey groups have established a fairly satisfactory system of public schools to which they send their children with some regularity is rather good evidence that they have been prosperous and successful farmers.

The Vineland "colony," with its miles of country roads or "streets," bearing Italian names and thickly lined with the homes of small farmers, its Italian holidays and celebrations, its churches thronged with foreign worshippers and its schools filled exclusively with pupils of Italian origin is one of the best examples of a large, isolated, racially homogeneous immigrant rural group. The rural isolation has tended to perpetuate old country traditions, customs and language; Americanization has proceeded slowly, and there has been very little fusion or amalgamation either with natives or other race elements. The adult immigrants learn English much more slowly than in cities or in rural places where there is less segregation by race and religion. The parish priests use Italian almost exclusively; Italian is spoken in the home, the fields, at the social gatherings and to some extent in the school yard. Considering

these facts, the progress made by the North Italians, especially, in American citizenship and ideals is remarkable.

While the settlement of foreigners in large, compact groups has some advantages, chiefly to facilitate the founding of a colony, it is questionable whether the incorporation of these large, unassimilable alien lumps into the rural body politic is expedient in the long run. It is essential that the progressive inhabitant come into touch with the currents of American thought, American methods and American life as rapidly as possible. In one or two sections where the immigrants have purchased homes in districts settled by native farmers and have found themselves, so to speak, sandwiched in between American landowners, progress in amalgamation has been much more rapid, although the initial difficulties were greater for the foreigner.

The Italian rural settlers both in New York, New England and the Southern States are very largely small farmers engaged in truck growing, market gardening, berry culture or cotton raising. In general, they are owners of small holdings, though the form of land tenure is really a matter of the custom of the locality. For example, immigrant cotton growers are chiefly tenants who offer the highest competitive rents for the land they wish. In contrast, their Sicilian blood relatives who moved from the cotton districts to the hills of Arkansas, are all owners of the land they operate. The same may be said of Polish farmers, who are perhaps among the most eager of the home builders. The great majority own their farms, but in Texas among the cotton growers, in the old settlements of Illinois and Wisconsin, where land is high and necessary equipment expensive, and among the recent Slavic onion and tobacco growers of the Connecticut Valley tenants are very frequent. Immigrants of all races are profoundly affected by their environment, by the economic exigencies of the situation.

Nor are the Italians small farmers only, although all their old country knowledge and training inclines them to "petite culture." One of the most successful small colonies of Italians is located in western Wisconsin, where dairying, cattle raising and cereal crops are the chief agricultural sub-industries. Large herds of cattle, numerous horses, modern horse-power machinery they handle as easily and effectively as their neighbors, immigrants from Germany and Scandinavia. In whatever line of farming the Italians,

either North or South, have seriously engaged, they have demonstrated their adaptability and efficiency, frequently greater efficiency than their neighbors or predecessors. Whether raising fruit on the stony uplands of Connecticut or the sandy wastes of New Jersey, growing cotton on the black land of the Brazos Bottoms or vegetables on the black muck of western New York, cultivating strawberries on the Gulf coastal plain or potatoes in the cut-over region of northern Wisconsin, irrespective of climate, soil, topography or products of agriculture, the Italian immigrant on the land has made good as a producer. And where he has been given aid and encouragement he has proved a respectable citizen.

Polish Farmers

The Poles are a better known and perhaps a more important element in rural immigration. The first current of Polish immigrants set in from Poland to northern Illinois, Wisconsin and Iowa during the 60's and 70's. The initial Polish immigrants were a superior sort. More or less independent abroad, they came to America to take up the new, free land and build homes for themselves. After 1885, when numerous Polish communities had been planted here and there over the Lake States and the western prairies, the character of the immigrants began to change. A smaller percentage are peasants or independent proprietors; more have been day laborers abroad, and in the United States have been employed in mines, quarries, steel mills and other industrial pursuits. They have been attracted to the land by advertisements in Polish newspapers or the solicitation of Polish land agents. They represent induced immigration; they settle in small groups; their choice of location is influenced or directed by outside persons. Having more ready money than their predecessors they have been able to purchase more of the tools and equipment essential to modern farming. These Polish settlers have proved promising pioneers and have developed a number of prosperous communities on the cut-over timber lands of northern Wisconsin, the less desirable prairies of the Dakotas and the unproductive land of Illinois and Indiana chiefly because these lands could be bought cheaply.

The settlement of Poles on the so-called abandoned farms of the East has not assumed significant proportions, nor is it at all probable that the more isolated hill towns of New England, for

example, will be populated by desirable alien farmers for many years to come. Until some money crop has been found, peculiarly adapted to the rough, stony soils, by means of which the newcomer can sustain himself until his depleted acres begin to produce abundantly, the ambitious Slav is not likely to take kindly to colonization on exhausted areas. The former occupants of the old eastern farms practiced a form of agriculture that for years proved uneconomic and eventually gave up the undertaking. The new arrival faces a worn-out soil, an obsolete agricultural system, the necessity for the reorganization of crops and farm practice, with no resources save his characteristic capacity for hard work, and usually a large and willing supply of labor in his family. He needs knowledge and current capital and a long period of waiting; meantime he finds it almost impossible to win a subsistence and accumulate any savings.

But on the more fertile areas, where high-priced land devoted to a specialized money crop, largely dependent on manual labor for its successful cultivation is characteristic, Polish immigrants, and Portuguese and Hebrews as well, have found agriculture a profitable occupation. In the Connecticut Valley, into which they first entered as farm hands about 1890, they are taking possession of the fertile onion and tobacco lands with increasing rapidity, both as tenants and as owners. In certain towns some of the very choicest of the old New England farm homes have passed into the ownership of Poles. Their large families and their willingness to work long hours enable them to out compete the American onion and tobacco growers. They are able to offer prices for land that the American owner cannot afford to refuse. Their natural increase is steadily overwhelming the decaying native population. There is scarcely a shadow of doubt that the foreign influx will take complete and permanent possession of many rich rural towns where agriculture is a profitable undertaking.

What has been said of the Poles in western Massachusetts may be said of the foreigners on the muck lands in west central New York, of the Portuguese in the town of Portsmouth, Rhode Island, of Hebrews and German-Swiss in the valley of western Connecticut and in certain localities in Maine, where Finns and Swedes have formed colonies. The tale is ever the same. Given a product that will return money in exchange for manual labor,

and cheap living, hard work, large families, long hours and little leisure will inevitably win in the competitive economic contest. Within a decade we may look to see a much larger number of immigrant groups occupying the pick of the soils of New York and New England.

Co-operative Adaptability

Among the Italians, and to some extent among the Poles and Portuguese, specialization of products by localities is a noteworthy economic feature of their agriculture. Practically every farmer in the community is engaged in raising the same principal product. Instead of competition this results in efficient rivalry, co-operative endeavor and highly specialized production. Strawberries, blackberries, sweet and Irish potatoes, tobacco and certain truck crops and orchard fruits were found occupying the entire attention of farmers in as many different localities.

In co-operative undertakings the foreigners have a distinct advantage over the native farmers because of their racial homogeneity. If class consciousness has not been adequately developed, there is at any rate a race consciousness which forms a groundwork for community spirit and commercial co-operative endeavor. At Independence, Louisiana, for example, where the marketing situation demanded a united interest, the Sicilian strawberry growers came together with commendable facility and effectiveness to market their berries and to purchase fertilizers and berry boxes. In several of the more northern colonies the Italians exhibit aptness in co-operating and unite very successfully to sell produce, to purchase supplies and equipment and to manufacture their surplus raw materials of agriculture. In establishing local co-operative business enterprises the immigrants are much more uniformly successful than their native white neighbors.

Americanization and Assimilation

It is remarkable that comparatively few Polish farmers in New England are recruited from the industrial centers. The Pole comes to the land directly from his home abroad. If he has not money to rent or purchase, he begins as a farm hand and in a very few years graduates as an owner of the farm. Coming from abroad the greater number have little or no knowledge of English and none of American civic ideals or community life. For this

reason some thoughtful people have greatly regretted the inflow of immigrants to rural New England.

This movement is, however, economically inevitable under present conditions, and while Slavic farmers are less satisfactory than New Englanders, they are better than no farmers at all. Moreover, the prosperous condition of their agriculture materially hastens their Americanization. New England is beginning to recognize and make provision for their educational needs, and night schools, library facilities and instruction in civics and morals are being placed at the disposal of the rural foreign-born groups.

In general, all foreign rural communities in the East, particularly Hebrew farm colonies, where not very large nor closely segregated, manifest a lively desire to speak and read English, to adopt American dress, customs and methods of farm practice, and where encouraged, to seek naturalization as quickly as possible. There is no question that assimilation and Americanization take place more rapidly among the less segregated rural immigrants than in congested industrial groups in urban localities. Land ownership confers dignity, imposes financial and social responsibility, stimulates activity in civic affairs and awakens community interest and personal pride. In short, so far as the immigrant is concerned rural life in most instances has had a most salutary effect. It has frequently taken an ignorant, abject, unskilled, dependent foreign laborer and made of him a shrewd, self-respecting, independent farmer and citizen. His returns in material welfare are not great, but he lives happily, comfortably and peaceably and in time accumulates a small property. The second generation of these south European immigrants are frequently not less progressive than the Americans.

Leadership

One influential factor in the social and civic progress of the rural group is the quality of its leadership. In the southern colonies, situated in states with inadequate rural schools and non-compulsory attendance laws; where there is little incentive to local political activity; where tenant neighbors take little interest in citizenship or community affairs, the lack of strong leadership is very noticeable. Few have qualified as voters, and the percentage of illiteracy is relatively high. Certain southern colonies, however,

have been fortunate in possessing strong and wise leaders, American or foreign, who have insisted on educational facilities and religious institutions; have urged early naturalization and encouraged participation in public affairs; and have made plain the way to Americanization and higher standards of living. To these opportunities the foreigners respond promptly and eagerly.

Between the Italian cotton tenants of the Mississippi Delta region, among whom are few citizens, numerous illiterates, few children in school, very meagre community institutions and no political interest and their kinsmen in upland Arkansas with a majority of naturalized citizens, a most lively participation in public matters, exceptionally fine educational and religious institutions, little illiteracy and a rapidly rising standard of comfort, the contrast is most striking. The social superiority of the upland Arkansas colony is due largely to efficient leadership and individual ownership of land. Other instances might be cited to demonstrate the very significant truth that progress is much more rapid and satisfactory where there is some one to lend a friendly hand from the beginning.

THE RURAL NEGRO COMMUNITY

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The first rural Negro communities were started in slavery times. They were established by free Negroes, who emigrated from the South, in order to escape the hardships of the "Black Laws" which, particularly in the latter days of slavery, bore with unusual severity upon the class known as "free persons of color." The establishment of the American colony of Liberia, Africa, was a result of this desire on the part of free colored people to find a place where they might escape some of the indirect burdens of slavery. Liberia, however, merely represented a widespread movement among Negroes, who had escaped slavery, to establish homes and communities of their own, not only in Africa but wherever freedom was assured them.

For a number of years before emancipation little colonies of free Negroes were established in several parts of Canada, and in states of the Middle West, especially Ohio, Indiana and Illinois, the region which, by the Ordinance of 1787, was dedicated forever to freedom. There were colonies of free Negroes established at this time in several other states—New Jersey and Michigan, for example. After the Civil War was over and Negroes were granted the same rights and the same freedom as other citizens these little rural communities tended to break up and disperse, but the remnants of them still exist in many parts of the country.

The Negro rural communities which have grown up since emancipation have had other and different motives for their existence. They have generally sprung up as a result of the efforts of Negro farmers to become landowners.

For the first twenty years of freedom there was no great disposition, so far as I can learn, on the part of Negro farmers to become landowners. During this period the Negro people and particularly the Negro leaders, were absorbed either in politics or in religion, and constructive efforts of the race were chiefly absorbed in organizing their religious life and building churches.

After the masses of the Negroes lost the influence in politics,

which they had exercised directly after the war, there was a period of some years of great discouragement. Gradually, however, it began to dawn upon the more thoughtful members of the race that there was hope for them in other directions.

They found, for example, that in communities where there was very little encouragement for a Negro to vote there was nothing which prevented him from owning property. They learned, also, that where their white neighbors were opposed to a Negro postmaster they had not the slightest objection to a Negro banker. The result was that the leaders of the race began to turn their attention to business enterprises, while the masses of the people were learning to save their money and buy land.

The first Negro bank was established in the latter part of the eighties. At the present time there are something over sixty Negro banks in different parts of the United States. In the meantime the Negro farmers, particularly in recent years, have been getting hold of the land on which they work. There are, for example, at least three counties in the South in each of which Negroes own and pay taxes on something like fifty or sixty thousand acres. In Louisa County, Virginia, Negroes own 53,268 acres; in Liberty County, Georgia, they own 55,048 and in Macon County, Alabama, Negroes pay taxes on 61,689 acres of land.

Some years ago I wrote a series of magazine articles on the subject of the Negro Town. In each of these articles I attempted to describe a distinctive type of Negro rural community. One of these was a town that had grown up around a Negro college in Ohio,¹ two others were towns that had been settled and built up by Negro farmers and had become the centers of Negro farming communities. One of these was Mound Bayou, Mississippi; the other was Boley, Oklahoma.²

I shall not attempt to repeat here the descriptions which I gave at that time of these Negro towns and the communities surrounding them; I only refer to them as illustrating a more general movement which has been going on, for a number of years past, on a smaller scale in other parts of the country.

It is this more general movement and the smaller and more remote farming communities it has produced that I desire to describe here.

¹ *World's Work*, September, 1907.

² *World's Work*, July, 1907; *Outlook*, January 4, 1908.

The first rural Negro communities that were established after the war grew up almost invariably around a little country church. The church was at this time the center around which everything revolved. It was in fact the only distinctively Negro institution that existed. It was in the church or, perhaps, in the grove surrounding it, that the political meetings were held in the days when the masses of the people were still engaged in politics. After politics had ceased, to some extent, to be a live interest the church still remained the center of the intellectual, as well as of the religious life of the people.

When I first went to Alabama I spent a large part of my time going about the country speaking to the people in the churches about the kind of education we are trying to establish at Tuskegee. Not infrequently I found that, in connection with the church, there would be a debating society which met at some time during the week to discuss questions of various kinds. After country people had ceased to discuss political questions these clubs, when they found nothing of more burning interest to talk about, sometimes got into lively debates over some good old-fashioned question such as, "Which is better, the town or the country," or "Which is more useful, the mule or the horse." I found that in these churches anyone who had any new question to present was always sure of a large and interested audience.

In more recent years, in many parts of the country, the school has, to a large extent, taken the place of the church as the center of life in the rural districts. In the early years of freedom the place of every individual was fixed in the community by the fact that he supported either the Baptist or the Methodist denomination. At present, however, the management and welfare of the school occupies, in many parts of the country at least, as large a part of the interest and attention of the community as the church.

In many cases the people have united to tax themselves, in order to build schoolhouses and to lengthen the school terms. Most of the efforts made by outside agencies, like the Anna F. Jeanes Fund, to improve the rural public schools have been directed to bringing the work of the school into closer relations with the practical interests of the rural communities.

Although in the Southern States the school officials are invariably white men, the Negro communities frequently elect trustees of

their own. These colored trustees have no legal standing, but the conduct of the school is very largely in their hands and in the hands of the "patrons," that is to say those individuals in the community who contribute something to the support of the schools.

On the whole, I believe that the control which, in this indirect way, Negroes have come to exercise over their own schools has had a good influence not only on the people, but also upon the schools. It has introduced a new interest into the life of the community. There is more to do and to think about than there used to be, and I believe I can safely say that there is a greater disposition among the people, in spite of the attraction of the city, to settle down upon the land and make themselves at home in the country districts.

Perhaps I can best illustrate the results of the changes by describing the progress which has been made, during the past eight years, in the country directly around Tuskegee Institute. Macon County, Alabama, in which the institute is situated, has a population, according to the last Census of 26,049, of which 22,039 are Negroes. The county is situated in the edge of the great prairie or Black Belt of Alabama, on which the great plantations are located. The result is that there are very striking differences in the character of the population in the different parts of the county. When, after emancipation, the colored people first began to get hold of the land, they settled as the class of poor whites before them had done, upon the light soil and cheap lands in the northern half of the county. As these settlers grew more numerous they generally formed little communities made up, for the most part, of men who owned their own lands. The majority of the Negroes, who were not willing or able to acquire lands of their own, remained as tenants on the large plantations in the southern part of the county. As might be expected there is a good deal of moving about of tenants on these big plantations. In the early days a Negro tenant felt he must move about more or less, merely in order to assure himself that he was actually free. This disposition has not yet, I am sorry to say, entirely disappeared. The result is that except in those cases where tenants have become attached to the plantation on which they work and made to feel at home there, Negro communities of tenant farmers have not been very permanent. There are, however, in Macon County several model plantation communities.

There are altogether about fifty distinct Negro farming communities in the county. Each one of these has a church and a schoolhouse, little stores, or a cotton gin belonging to some of the larger Negro landowners or to the white planter on whose land the community is located. There are about sixty business enterprises of various kinds carried on by Negroes in the county. Forty-eight of these are in the town of Tuskegee and the village of Greenwood adjoining the Tuskegee Institute and the remainder are little country stores in the country districts.

As concerns the Negro landowning communities I ought, perhaps, to say that it was not until about ten years ago that Negroes began to buy land to any very large extent in this part of the country. Down to 1900 there were not, according to the Census, more than 157 Negro farmers in Macon County who owned their own farms. At the present they number 503. Negroes pay taxes on property of the assessed value of \$419,821. The figures in the county tax assessor's office show that within a period of two years from 1908 to 1910 the tax value of lands owned by Negroes increased \$94,347.

Directly and indirectly this growth in the number of Negro landowners has been, to a very large extent, brought about by the improvement of the colored public schools throughout the county. About six or seven years ago the Tuskegee Institute was given a sum of money, in order to determine by experiment, to what extent the Negro farming communities in the surrounding county could be improved, materially and otherwise, if serious effort was made to improve the rural schools. It was not intended to use this money for the purpose of giving colored people schoolhouses and providing them with teachers. It was to be used rather to encourage them to help themselves. The money thus secured was called the Rural School Improvement Fund and in order to carry out the plan proposed a man was employed as agent, who, with the consent of the county superintendent, acted as a sort of supervisor or assistant superintendent of Negro schools. His real work consisted less, however, in supervising the work of the rural teachers than in carrying on an educational campaign throughout the county in order to stimulate the colored people to raise funds among themselves to rebuild their schoolhouses and lengthen their school terms. As a result of the campaign begun in this way colored people raised

during the next five years something like \$20,000 which was used in building schoolhouses and lengthening school terms.

As soon as a certain number of these schools were established advertisements were inserted in the colored newspapers throughout the South advertising the fact that land could be purchased in small tracts near an eight months' school. Very soon the advertisements began to attract attention. Colored farmers began to move in from the adjoining counties. Many of them came to obtain the advantages of a good country school for their children. Others came not merely for this purpose but to buy land. The effect was to bring in a more enterprising class of Negro farmers and to increase the price of land.

Meanwhile a little farmers' newspaper, *The Messenger*, as it was called, had been started for the purpose of organizing the county, stirring up interest in the improvement of the schools and stimulating the efforts of the farmers to improve their methods of farming. The preachers and teachers of the county organized an association for the purpose of pushing forward the movement. Demonstration plots were established in the neighborhood of the schools and, under the direction of the United States Demonstration Agent, the teachers began teaching farming in the schools. The preachers encouraged the movement from the pulpit and *The Messenger*, the farmers' newspaper I have referred to, made an effort to report every step that was taken, in any part of the county, looking to the education and general improvement of the people.

Through this paper the farmers of the county were brought into closer touch with the work of the Institute and the influence of the school upon the community was strengthened and deepened. In fact, it would not be far from the truth to say that the Negro communities in Macon County have made more progress during the last five years than they did during the previous twenty-five.

The work which was attempted on a small scale in Macon County, Alabama, has been undertaken in a larger way in Virginia where the state has created a state supervisor or superintendent of Negro schools, whose task has been to co-operate with and to encourage and direct the Negro people of the state in their efforts to improve the conditions of the rural schools. More than this, under the leadership of Major R. R. Moten of Hampton, what is called an "organization society" has been formed for the purpose of bring-

ing about co-operation between the various Negro organizations of the state religious and secular, to improve the school system and bring the work of the schools into closer touch with the life and practical daily interests of the people.

In what I have written I have sketched the conditions and the progress of a type of rural communities in which Negroes own, to a very considerable extent, the lands they work. A large part of the lands in Macon County are held, however, in the form of big plantations and worked by tenants. As I have already said tenants on large plantations do not, as a rule, permanently settle on the land, and, as a result, community life is not as well established. There are, however, several plantations in Macon County where something like a permanent tenant community exists. In order that I may give a definite notion of the way landlord and tenants get on together on such a plantation as I have referred to, it will not, perhaps, be out of place to repeat here the substance of a letter which I wrote to the editor of the *Montgomery Advertiser*, concerning the manner in which one of our most successful white planters, Mr. J. W. McLeod, controls the little Negro community on his plantation.

The greater part of Mr. McLeod's plantation of 1,800 acres is located in Macon County, but it extends over the line a half mile into Bullock County. At Hannon's Station, which is about the center of the plantation, there is a colored settlement of about seventy-five or eighty families. This community has a good schoolhouse, with attendance of 110 pupils. The building alone cost, I understand, about \$800, and last year the people raised \$127 to put in regular factory-made seats and desks.

For several years Mr. McLeod has followed the plan of giving an annual barbecue dinner to the tenants, making that dinner the occasion for distributing prizes among those who had made the most progress during the year, and for giving them good, wholesome advice, that would help them and encourage them to do better in the future. This year Mr. McLeod celebrated the close of the farming season by distributing \$200 in prizes among his tenants. A number of teachers from the Tuskegee Agricultural School were invited to inspect the homes and the general conditions and act as committee to assist in awarding the prizes. The committee spent two days on the place, visiting and inspecting the farms and homes of forty-one tenants.

Prizes were given to those who showed the most progress in the preparation and cultivation of the crops; to those whose stock showed the most intelligent care and treatment; to those who kept the best homes. Then there were several prizes to certain individuals for special interest in the care of stock; for making good upon a steer farm, and for making a success at rough land farming. The prizes ranged all the way from \$12 to \$25. Any man or woman guilty of drunkenness or of abusing his or her family was debarred from the contest.

The program this year was a long one. There was first an evening meeting at the schoolhouse on the day of the arrival of the committee. At this meeting there were reports on the Farmers' Improvement Club of Hannon, interspersed with singing of good old-fashioned plantation melodies. Then there was a debate in which all the farmers and their wives took part. The subject was: "Resolved, That Woman Is of More Service Upon the Farm Than a Man." The women won, "not because," as one man explained it to me, "they were really of more use than the man, but because they were better in an argument." Meanwhile the animals had been slaughtered for the barbecue and, while a crowd of laughing, happy people gathered around the pit where the two whole beeves, two hogs and four young goats were already sizzling over the glowing coals, they were entertained with coffee and buttered biscuits, spiced with much good humor and lively conversations. The next day a crowd of at least a thousand people gathered to share in the barbecue and see the prizes distributed. There were speeches by several white planters and business men, and then by several colored farmers and, finally, by the committee of teachers from Tuskegee.

I can perhaps give a better notion of the relations of Mr. McLeod to his tenants and the conditions which prevailed in the community if I quote from his letter to the judges who were to award the prizes for the year. This letter was as follows:

To the Judges:

I am glad to be able to report that there has been a decided improvement in conditions over 1910, as seen by me and reported by Mr. Colvard, in efforts on the farm and in the care of work stock, with the exception of three tenants.

There has been general improvement in conduct, no broils, all peaceable amongst themselves, and all seem to have regard for each other, and are ready and willing to receive advice from Mr. Colvard.

There is one case especially. This tenant had gone to the bad from the use of whiskey, but is now making a man of himself and is treating his family as a husband and father should.

I am sorry to report there is one who has not fully reformed, but I am sure that he will profit by the experience of others and during the year 1912 will stand in line with others who are trying to live sober and correct lives.

Of the women, they are keeping cleaner houses and taking better care of the children, which is a decided advance with them.

To improve the conditions of the black man along the lines I have mentioned I have given prizes during the last two years, and feel sure it has been worth while to them and paid me pecuniarily; besides it is quite a satisfaction to see them advance in all of their interests.

(Signed) J. W. McLean.

I might add, in conclusion, that the committee of teachers from Tuskegee who acted as judges were greatly impressed with the results that have been obtained by these methods, not only in the way of improvement upon the farms, but also in the homes. As one committee who inspected the different homes on the plantation said to me: "One woman kept her house so clean and so attractive inside and out that we were ashamed to go in it." What I have said concerning this and other Negro rural communities, both on and off the large plantations, is an indication of what can and is being made of farming life by Negroes under favorable conditions; that is to say, where they have had a chance.

SOUTHERN AGRICULTURE, PLANTATION SYSTEM, AND THE NEGRO PROBLEM

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The Problem of the Negro is the Negro.—This is no mere truism. Rather, it is the proposition which has been the chief basis of disagreement between the North and South with respect to the negro. The North has assumed the negro's degradation and lack of progress as due to the repression of his social environment. The South has emphatically asserted that the negro is the source of his own misfortunes.

That Southern institutions are repressive in their influence will be shown in the following pages. On the whole, however, the negro is the cause of the institutions, which in turn react upon his condition.

I wish to confine this article in substance to a brief statement of the relation of Southern agriculture to the negro problem. I may be pardoned, however, for prefacing this statement with a brief summary of those peculiarities of negro psychology which most intimately condition his economic reactions, even at the risk of some reiteration.

The negro is a good cotton "hand"; that is, he can perform the large amount of purely mechanical labor which that crop demands. Possessed of great endurance, especially with respect to exposure to heat and malaria, with a low standard of living, and willing to supplement his own labor with that of his wife and children, it is probable that, under effective supervision, he can more than hold his own.

Moreover, the average Southern negro farmer knows how to "make cotton"; is familiar with the routine methods generally followed in his district. In spite of this, the average negro farmer is a pitiful failure when not subject to white supervision. In the vast majority of cases his farm is apt to become a weed patch. This, because the negro lacks two essential economic qualities. He is generally incapable of steady and purposeful labor when left alone,

and he is equally lacking in judgment. Added to this is his normal thriftlessness which prevents him from accumulating the necessary equipment.

This is the significance of the Black Belt. It has been several times pointed out that the negroes in the Black Belt are noticeably more immoral, more thriftless and generally more irresponsible than those who reside in localities less entirely inhabited by negroes, as, for instance, the cheap pine lands of Texas, Louisiana and Arkansas. This difference would be obvious to the most casual observer traveling in the South. It is confirmed likewise by statistics of illiteracy and per capita wealth.¹ Freed from the powerful social coercion of a negro environment, the negroes outside of the Black Belt are also less numerous relatively to the white population, and thus subjected to the influential stimulus of white example, which is especially beneficial in the field of family relations.

The contrast is not so marked, however, in the economic life of the two regions. The isolated negro family in the regions of poor land frequently has the advantage of land ownership, and this, together with the absence of a negro social environment, makes for a greater thrift. The very slight superiority in this respect is more than offset by the loss from lack of the white supervision, by which negro agriculture is so greatly benefited under the regime of plantation organization. Indeed, the negro's lack of economic qualities is the *raison d'être* of the Southern plantation system, which is the most important economic institution connected with the negro problem.

The industrial superiority of the plantation system has been conclusively demonstrated by the sure test of economic survival. In the early decades of the nineteenth century, when the tide of immigration was moving westward, the plantation system supplanted the primitive economy of the squatter farmers who were its forerunners. This process was a continuous one in the ante-bellum period. The small farming class on the superior cotton lands became fewer, while the planting economy increased its industrial dominance.² Likewise, in the reorganization since the war, the plantation system has become

¹ Bulletin 8 of the *Permanent Census*, "Negroes in the United States," pp. 95-98. Vide especially R. P. Brooks, "A Local Study of the Race Problem," *Political Science Quarterly*, June, 1911.

² U. B. Phillips, "The Origin and Growth of the Southern Black Belts," in *American Historical Review*, July, 1906.

an important system of agricultural organization, especially in the best cotton lands.

Since the abolition of slavery destroyed an important criterion, it is not easy to define the post-bellum plantation system. The name plantation is employed very loosely. In its broadest sense, it is used to signify any large land holding operated with any degree of unity. The limits of this article do not permit a detailed description of the many varieties of the so-called plantation system nor of the special features of plantation organization. In the sugar region the plantation is frequently a highly organized business with a half million dollars invested in agriculture and possessing the elaborate organization of a great factory.

At the other extreme is the cotton plantation worked by tenants who rent the land and receive the occasional advice of the landlord or merchant. The tenant keeps his own stock and to a large extent runs the place to suit himself. So loose is the organization that it is doubtful whether the name "plantation" should be applied to it. Between these extremes there are many variations with respect to closeness of supervision and of organization, as well as in size.

The prerequisite of large scale industry in agriculture, and, therefore, of the plantation system, is a stable labor supply. Before the war, this was secured by the institution of slavery. Immediately after the war various forms of tenancy as well as wage labor appear to have been resorted to.³ The latter arrangement has proven generally unsatisfactory for plantation organization, because the laborer has no financial interest in the outcome of his labor. Consequently, he may quit his work at the most critical time. Moreover, he must be closely watched during every hour of his labor to prevent shirking. At present, the plantation system based primarily on hired labor is of little importance outside of the sugar region.⁴

It is to be noted, however, that as agricultural methods become more intensive, the tendency toward hired labor is greater because

³The industrial history of the first twenty years after the war is extremely obscure, especially as there are no census statistics of tenancy until 1880. No adequate monograph exists on the subject, although one or two studies have been made of post-bellum reorganization for particular states; notably A. E. Cance, *Tenancy in Mississippi*, and E. M. Banks, *Land Tenure in Georgia*.

⁴To judge the importance of hired labor as the basis of the plantation system from the census statistics of agricultural laborers would result in a tremendous exaggeration; for the census figures include women, and children over ten years of age, as well as casual laborers working in harvest and laborers outside of the plantation belts.

the cost of supervision becomes relatively smaller. There are indications that this tendency is increasing at the present time in the South.

On account of the drawbacks of the labor system, tenancy has become the standard method of employing negro labor. It insures a deeper interest in the crop and economizes supervision. It likewise transfers a portion of the risk to the tenant. In the South tenancy has assumed several characteristic forms which must be described briefly to make clear the relation of the present industrial organization of Southern agriculture to the negro problem. Confining ourselves to the most important forms, and omitting the limited sugar and rice regions, three important tenant systems may be distinguished.

In the cash or standing rent system the negro pays a fixed amount of cotton lint per acre or per farm. In the eastern part of the cotton belt, and sporadically in the western part, this system is known as "renting." It is almost invariably characterized by very loose methods of supervision and organization. The landlord has little interest in the result of the crop or the efficiency of the methods employed, provided the rent is paid. He is generally an absentee and is not represented by a resident manager.

There are two principal forms of share tenancy. In the first, the landlord furnishes all the expenses of making the crop except the labor, both parties sharing equally in the crop. This is popularly known as "cropping." In the second form the landlord furnishes the land; and the tenant provides the labor, mules and implements. The landlord receives as rent one-third of the corn and one-fourth of the cotton. There are other minor variations of this system. Geographically, the cropping system is prevalent in all parts of the South. The third and fourth system, however, exists chiefly west of the Mississippi. Usually the cropping system is characterized by exceedingly close supervision and organization, because the planter has risked mules and implements as well as land in the negro's care and has a large interest in the outcome. Therefore, the cropping system, especially in the western South, is prominent in the rich alluvial bottoms and other regions of superior cotton lands.

The third and fourth system is normally a much looser form of organization than the cropping system. Sometimes where the third

and fourth renter is on the better lands, he is almost as closely supervised as is the cropper, but normally the third and fourth system are most prominent in those poor lands which do not demand close plantation organization.

The prevalence of the cropping system on the better lands is to be explained by several facts. In the first place, these superior cotton lands, with the exception of the Texas Black Prairie, were the seats of the ante-bellum plantation system. Since the negro has largely remained in the old situs, the natural connection between the plantation system and the necessity for supervising negro labor finds expression here. Again, economic forces have heretofore made a one-crop system most profitable on the best cotton lands of the South. Normally, the plantation system has proven itself best adapted to the production of one main market crop. It is obvious, too, that the greater value of the superior lands places a premium upon the more efficient supervision. In many parts of the South, particularly in the Southwest, these superior lands consist of river bottoms where the difficulties of coping with floods and the greater abundance of weeds and noxious insects place an additional premium on good management, while at the same time the prevalence of malaria forces a reliance on negro labor.

The merits of the plantation system must be estimated in terms of two all-important considerations: First, in its relation to social production and its efficacy in producing temporary social and economic order in a population of the lowest industrial capacity; second, in its relation to the welfare of the negro and the ultimate promotion of negro progress.

It is apparent that the plantation system, judged from the point of view of social production merits considerable approbation. It has been the means whereby the negro has been made a serviceable factor in Southern industry. This accomplishment must be reckoned an important offset to the disadvantages of the system.

It is easy, however, to overestimate the importance of the plantation system as a bulwark of Southern agricultural organization. In the above analysis of the several systems of tenancy, it was pointed out that only one of the three forms, the so-called cropping system, implies a sufficiently close industrial organization to merit this approbation. The relative importance of this system to the other forms cannot be stated with precision until the publica-

tion of the Thirteenth Census. It may be said with confidence, however, that it comprises a relatively small proportion of the entire industry carried on by negro labor in the South.

Before proceeding to estimate the relation of the plantation system to negro progress, it is necessary to refer briefly to another factor which is intimately connected with all the forms of agricultural organization—the credit system. The plantation system as a form of coherent industrial organization is limited in extent; but the credit system is co-extensive with negro agriculture. The negro who owns clear title to his industrial equipment or possesses enough capital to furnish provisions throughout the year is exceptional.

There are three main sources from which the negro secures these necessities on credit—the plantation owner, the merchant and the bank. Generally speaking, the landlord credit is most prominent in the region of close plantation organization; the merchant credit in those districts of absentee landlordism and absence of close organization. The bank is a comparatively unimportant source of credit to the negro farmer. It is, however, becoming increasingly important. Attracted into the field by high rates of interest, the influence of the banker's competition is in the direction of lowering and standardizing the terms of credit transactions. Most such loans are on security of chattels and crop liens, frequently with a waiver of the landlord's lien. As yet, they are confined to the more responsible class of tenants.

The credit system has been so closely associated with the plantation system in the South that it has sometimes been forgotten that they are two separate institutions. The latter, we have seen, has no small social utility. On the other hand, the only justification of the credit system has been that no better arrangement has been developed for the performance of a very necessary function. The general defects of the credit system have been pointed out so frequently that it is not necessary to enter into a full description of its method of operation. The most vicious aspects of the system are due to the negro himself. The negro is so thriftless that he prefers to borrow rather than to accumulate enough for his living expenses while making his crop. He is so ignorant and so careless of consequences that he will accept almost any terms. The same ignorance prevents him from keeping any account of the advances, although this is partly due to the fact that in case of discrepancy the lender's

account will prevail. Very generally also the planter markets the tenant's crop—almost invariably so under the cropping system—and the tenant is equally helpless to determine the justice of the final settlement.

The inevitable result is exploitation of the sheerest type; high prices for supplies, high interest charges, sometimes falsification of accounts. There is no doubt that such exploitation is very general throughout the South. It does not, as a rule, violate the letter of common honesty, as, for instance, by the falsification of accounts. More often it is merely the advantage which the very strong takes of the very helpless. Not infrequently it is tempered by moderation. The situation was picturesquely expressed by a negro man in the Brazos Valley in Texas, whom I was questioning. "Boss," said he, "some cuts de nigger too close to de bone, but dey all gash him a little." Then he supplemented his statement by the doggerel which has become almost commonplace:

"Naught is a naught
And a figger's a figger;
All fur de white man,
And naught for de nigger."

The credit system has been the basis of the so-called peonage which has been practiced in the South. The negro has no property which can serve as security for a debt. At the same time he must be advanced the necessary means of livelihood while making the crop. The lender has only one way of collecting the debt—by compelling the negro to work it out. This, however, is illegal under the thirteenth amendment, which forbids involuntary servitude except for crime.

The latter exception has been variously employed by Southern legislatures as a means of escaping the operation of the amendment. The Alabama law, for instance, made it a criminal offense for a negro to accept advances, under contract to work, and then violate that contract, on the ground that it is obtaining money under false pretenses. This law was declared unconstitutional last year in a decision of the Supreme Court of the United States on the ground that it is a mere subterfuge by means of which the constitutional provision is evaded. Typical peonage laws of another sort found in a number of Southern states provide that any planter who employs a negro indebted to another planter, becomes responsible

for the debt. Although there is less practice of peonage now than a few years ago, the present methods of coercion are more subtle and more difficult of conviction. Usually negroes are so densely ignorant that they know little of their rights under the law. There are thousands who have no idea how to obtain legal redress. It is easy to impose on such credulity to effect a practically coerced service. The mere moral prestige of the white and the fear of physical violence, rarely employed, but always a potentiality, are often sufficient.

Yet, evil as it is, peonage has been the outgrowth of a felt need; viz., a credit system by which the negro tenant may be furnished credit with a minimum of risk. The vicious system which forces the negro to hypothecate his labor to obtain credit results inevitably in divorcing the planter's interest from those of his tenant. The negro is retained chiefly by keeping him in debt. Not only does this intensify the tendency to petty exploitation, but negro thrift becomes contrary to the planter's interest. To encourage a negro to make his garden or "raise his meat" lessens his dependence on his master's store or commissary. If, moreover, the negro is caught stealing or "shooting craps," the master pays the fine and adds it to the negro's debt. In this way his hold over the laborer is strengthened. The natural result is a complaisant tolerance on the master's part toward such petty crimes as do not seriously injure himself. Thus the credit system has operated to intensify a tendency toward racial separation already growing rapidly.

In judging, therefore, of the merits of the two foremost industrial institutions, the plantation system and the credit system, it appears fairly certain that the latter, not the former, is chiefly responsible for the principal evils. There is a great need for the reform of the credit system. Divorced of its connection with this, the plantation system may be regarded as neither a great good nor a great evil. Its chief service has been in the field of production. It offers little or nothing to the solution of the negro problem. It is not conducive to negro progress ethically or economically. The establishment of social and industrial order was an important service, but the time has passed when we can afford to be content with a mere preservation of the *status quo*.

Nor will mere change in the negro's industrial condition be adequate. If every negro family in the South could be given the

ownership of a farm, it would not result in a permanent solution of the negro problem. With the present habits of inefficiency and thriftlessness, the negro could not retain the position thus artificially achieved against the force of modern competition.

On the other hand, the problem is more than educational. The impression prevails in the South that the ordinary form of education is worse than wasted. Even the industrial education promoted by Booker T. Washington and others is not to be regarded as a cure-all, although undoubtedly a means of uplift. The ethical basis of negro life must be profoundly changed before much can be hoped for. It is necessary to create for the negro a family life; to develop sentiments and motives which shall result in a social conscience in the race itself. It is hopeless to expect economic stability and thrift in a race whose family ties are temporary and based chiefly on animalism.

The negro's religion is the greatest obstacle to his ethical progress. It satisfies largely the craving for emotional excitement, with little emphasis on standards of conduct. The negro preacher, as a type, is an adept at arousing emotion, and very frequently a libertine and a scoundrel. It is the prevailing opinion in all sections of the South from which I have obtained information on the subject, that the negro preacher very frequently employs the prestige of his position as a means of gratifying his baser passions.

It remains to point out, not the means of solving the negro problem, but the method of approach. This huge protean shadow with which the old order grappled does not possess the same sinister menace for the new; for the negro problem is losing its sectional character and is becoming national in the sense of uniting the interests of both sections in its solution.

Among the causes of this should be mentioned the increasing social and industrial integration of the nation and the increased stream of negro migration to the North. Most influential of all is the increasing realization of the South that its industrial prosperity is largely dependent upon a progressive solution of the negro problem. Southern prosperity must depend on an extensive immigration of Northern capital and Northern industrial experience, which has heretofore been deterred by the peculiar institutions of the South.

In readjusting our point of view, it will be recognized that no

key can be found in the *egalitarian* philosophy of the eighteenth century; in the splendid idealism, which attempted to clothe a savage in the outward garb of civilization and citizenship, under the assumption that he was only prevented from rising to the full stature of the Anglo-Saxon by the repression of his environment.

The war freed the negro from the repressive influence of slavery. It also deprived him of the guidance and support for which he had looked to his master. Brought suddenly face to face with a high civilization, the resulting adjustment has been inadequate. Far better for all concerned had the negro's bondage been modified gradually. As it is, the problem must be approached under the hampering obstacles imposed by utterly impractical legislation. Worse still, it is impossible to rely on the close and friendly paternalistic relation which formerly united master and slave.

The question of social equality should be eliminated for the present. It is an absolute impossibility in the Southern States, whatever its ultimate desirability. This question has been settled in the far South with a finality that brooks no questioning. The negro accepts the relation as a matter of course. It is in the border states where the issue has not been so decisively settled that the real friction exists.

The most casual observer must admit that the policy as applied in the South has been an unusually effective method of controlling a race that would too easily drift into crime and license. A mighty change, however, must be wrought in the Southern point of view. It is necessary to undo the evil work of fifty years. The South must develop a greater sense of social responsibility with respect to the negro.

Only at one point is there a social consciousness in the South concerning the negro problem, and the essence of that consciousness is repression: "Keep the negro in his place." There is too little desire to deal with the problem in the spirit of improving the negro and making him a better citizen. Indeed, this spirit is impossible so long as the present separation between the races exists. To educate a possible foe is to place in his hands a keen-edged sword. Until the ground is cleared of such obstacles, it is difficult to accomplish practical programs of reform.

That these obstacles appear to be removing themselves is ground for the hope that the negro problem is not impossible of solution.

THE UNITED STATES DEPARTMENT OF AGRICULTURE

BY A. C. TRUE,

Director, Office of Experiment Stations, United States Department of
Agriculture.

From a humble beginning in the Patent Office in 1839, the work of the federal government relating to agriculture has steadily grown in extent and importance. As a separate department the semi-centennial of the department will occur this year (1912), and for nearly half that time its chief officer has had a seat in the President's cabinet. Its annual appropriations now aggregate about \$20,000,000. Its paid employees number about 13,000, of whom about 2,500 are stationed at Washington. Its agents are found in every state, territory and outlying possession of the United States, and in many foreign countries. In the extent of its business and the variety of its operations it far surpasses any similar organization in the world.

For the past fifteen years, which constitute the period of its most rapid and complete development, it has had the unique experience of being under the general management of the same chief executive, Secretary James Wilson, of Iowa. As a pioneer in the development of our greatest agricultural region, a successful farmer, a politician and congressman of long experience and great popular favor, a student of agricultural science and teacher in an agricultural college, he came to the department with experience and qualifications which fitted him in a very unusual degree for the great task ahead of him.

As a member of the cabinet under three presidents, he has taken an active part in the general administrative work of the government and in the political activities which under our form of government are inseparable from such a position.

In the management of the department he has maintained a broad and non-partisan policy as regards both the lines and location of its work and the appointment and retention of its personnel. The interests of all parts of the country have been carefully and impartially considered in the development of the department's work. The permanent tenure of office for efficient employees has been jealously guarded, the great mass of appointments have been regularly made

from the registers of the Civil Service Commission, and the relatively large number of technical and scientific experts and agents, who in accordance with special legislation and regulations have been appointed outside the classified civil service, have been chosen with reference to their qualifications for the work expected of them. As a whole, the general policy of the department will compare favorably with that of our best educational and scientific establishments maintained as public institutions. It is certainly very encouraging that the elevation of the department to the first rank of governmental establishments and its consequently close union with the presidential office have resulted in a progressive development of non-partisan policies and scientific ideals and practices in the conduct of its business.

The act of congress of 1862 which gave the department its separate existence laid the general foundation for its work in these words: "There is hereby established at the seat of government of the United States a department of agriculture, the general designs and duties of which shall be to acquire and diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word and to procure, propagate and distribute among the people new and valuable seeds and plants." Information was to be gathered "by means of books and correspondence and by practical and scientific experiments, by the collection of statistics and by any other appropriate means."

Special legislation has since further defined and extended the functions of the department. Some duties outside the pale of agriculture however broadly defined have been committed to the department's charge. On the other hand, the definition of agriculture as applied to the work of educational and scientific institutions has been so widened in recent years that the operations of the department—extensive and far-reaching as they are—do not yet in all respects cover the field of work marked out for it in its charter.

In its "most general and comprehensive sense" as applied to institutions for its promotion agriculture now includes not only whatever relates to the production of plants and animals useful to man and their use as closely related with their production, but also much that has to do with the organization and life of rural communities. Under this definition the main divisions of agriculture

are (1) plant production, including agronomy (field crops), horticulture and forestry; (2) animal production, including the breeding, feeding and management of animals, and veterinary medicine; (3) agrotechny, including the standardization of agricultural products as regards purity, efficiency, etc., and the manufacture of such products as are closely related with the farm (*e. g.*, dairying, sugar-making, etc.); (4) rural engineering, including roadmaking, irrigation, drainage, farm buildings and machinery, etc.; (5) rural economics and sociology.

The broadest work of the department has been on matters relating to plant production and has covered widely agronomy, horticulture and forestry. Under animal production the greatest work has been in veterinary medicine. The work on breeding, feeding and management of animals has been quite limited as compared with that done by the agricultural colleges and experiment stations, but is more definitely organized and in recent years has been considerably expanded. Under agrotechny a large amount of work has been done in the establishment of standards for foods and seeds, and the determination of adulterations of these materials. Considerable work has been done on matters relating to sugar-making, dairying, etc. In recent years the work of the department relating to roads, irrigation and drainage has been definitely organized and is rapidly expanding. Though the United States far surpasses the other nations in the manufacture and use of farm machinery, and though this involves large economic and social questions vitally affecting our rural communities, very little attention has been given to these subjects by the department, and congress has not been willing to extend its work in these lines. Aside from the regular collection of crop statistics and the publication in a limited way of information bearing on economic problems the department has thus far done very little in rural economics and sociology. In recent years, however, it has given some attention to studies of the distribution of agricultural products and the problems of farm management.

As perhaps a natural outgrowth of its functions relating to the industry which is most fundamental to human life and civilization, the department has taken on an increasing amount of work outside the field of agriculture. Such, for example, is a large part of the work of the Weather Bureau, the inspection of drugs, investigations

on human nutrition, studies of household and disease-causing insects, biological investigations relating to human disease, etc. Part of this has been given to the department under a wise administrative policy which seeks to make the most effective use of existing governmental agencies and facilities instead of creating new ones.

At the outset the educational and scientific institutions organized in this country for the promotion of agriculture dealt very largely with the sciences related to agriculture rather than with agriculture itself. This tendency was manifested in the organization of the department, where divisions were created for studies in chemistry, botany, entomology, ornithology and mammology. About the time of Secretary Wilson's coming to the department a movement arose to enlarge and specialize the more strictly agricultural work of the land-grant colleges and to base the organization of the colleges of agriculture on the divisions of agriculture considered as both an art and a science. In the department the Bureau of Animal Industry had already been established. All the work in agronomy, horticulture and agricultural botany was brought together in the Bureau of Plant Industry. Bureaus of forestry and soils and an office of public roads were created. The Weather Bureau was brought into the department. There are now also bureaus of chemistry, entomology, biological survey, and statistics. In 1888 the office of experiment stations was created to represent the department in its relations with the state experiment stations. This office has since been charged with investigations in irrigation, drainage, human nutrition and agricultural education. The great expansion of the department's work in lines directly relating to the practice of agriculture has given it a much wider and stronger influence among our rural people. At the same time the scientific work in lines related to agriculture has been greatly broadened and strengthened.

To understand the broad influence which the department now has among all classes of our people and the results which it has been able to accomplish in the promotion of agriculture, it is necessary to consider at least the main divisions of its work. Broadly classified the functions of the department are (1) administrative, (2) advisory, (3) investigational, (4) informational, and (5) educational.

Under administrative duties are those relating to the enforcement of the meat inspection, food and drug and insecticide and

fungicide laws with regard to both domestic and imported products; the control of quarantine for imported cattle and of interstate quarantine rendered necessary by sheep and cattle diseases and the inspection of cattle carrying vessels; the management of the national forest reserves; the regulation of interstate commerce of game animals and the control of the importation of noxious and other animals; the congressional seed distribution; the supervision of the federal funds granted to the state agricultural experiment stations and the direct management of the stations in Alaska, Hawaii, Porto Rico and Guam.

The meat inspection includes the ante-mortem and post-mortem inspection of cattle, sheep, swine and goats slaughtered at establishments engaged in interstate or foreign commerce; the supervision of such establishments and of the various processes of preparing, curing, canning, packing, etc., so as to insure sanitary conditions, equipment and methods; the marking and certification of meats and meat products; and the regulation of interstate transportation and exportation of such products. This inspection is carried on at 936 establishments in about 255 cities and towns. In 1911 there were inspected at slaughter 52,976,948 animals and 1,127,055 carcasses or parts of carcasses were condemned. The inspected animals furnished 10,000,000,000 pounds of meat. On reinspection 210,073,577 pounds of meat were condemned which had become unfit for food since the time of slaughter.

Live stock is also inspected at points of shipping, in transit and at market centers, cars are disinfected and quarantining and other measures are taken to eradicate or prevent the spread of contagious diseases of animals through interstate commerce. The quarantine against Texas fever of cattle in the southern states is being gradually restricted through the eradication of the ticks causing this disease. About 140,000 square miles, or one-fifth of the original infected area, have been cleared of ticks and released from quarantine during the past five years. In a similar way the parasitic diseases known as scabies of sheep and cattle, against which quarantine is necessary, are being eradicated in the western states. Over 1,000,000 doses of black leg vaccine were sent out and about 500,000 doses of tuberculin and mallein were furnished to local officials for the diagnosis of tuberculosis and glanders.

Inspections of hundreds of thousands of American and Cana-

dian animals for export are annually made, as well as of all animals imported from foreign countries.

The manufacture of 44,115,058 pounds of renovated butter was supervised at thirty-eight factories in thirteen states. The certifying of the pure breeding of all animals imported for breeding purposes has been undertaken under a provision of the tariff act.

The extensive operations of the department relating to animal industry have great economic importance. Their influence is broadly national and international. They affect profoundly the economic conditions relating to the growing of domestic animals and the commerce in them and their products. The quality and prices of animals and meat on the farm and in the market are in a measure determined by government regulation.

The same things may be said regarding the department's enforcement of the food and drugs act. Through its laboratory in the Bureau of Chemistry at Washington and twenty-one branch laboratories scattered throughout the country, the department is exercising a rigid inspection of a great variety of foods and drugs which enter into interstate and foreign commerce. Nearly one thousand two hundred cases were reported the past year for criminal prosecution or seizure of adulterated and misbranded goods. Besides its economic results as affecting the marketing, storage and prices of such materials, this work, as well as that of meat inspection, has a broad influence on the health of people in both city and country.

The management of the national forests involves the administrative control of 192,000,000 acres or 300,000 square miles of territory in the western states and Alaska,—a domain equivalent to the combined areas of Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, Ohio, Indiana, Illinois and Iowa. About 500,000,000 board feet of lumber were cut in the forests last year and the contracts for sale entered into during the year disposed of over \$2,000,000 worth of timber. Grazing permits, issued for 8,898,500 animals, yielded \$935,490. Extensive operations in road building, fire protection and reforestation are going on. A beginning has been made of the examination and purchase of forest lands in the White Mountains and the Southern Appalachians under the Weeks act, approved March 1, 1911. The policy of the department, as stated by Secretary Wilson, is to maintain, protect and improve the vast tract in the national forests for the public benefit and for

use as public utilities. "Their primary uses are to produce continuous supplies of timber and to regulate the flow of water. Subordinate to these uses, yet of large importance, are their use for grazing, for recreation and for many kinds of occupancy." When the national forests are fully developed and utilized it is evident that they will be a large factor in the agriculture of the country and in its industrial development.

Through its Biological Survey the department is doing much to prevent the rapid destruction of game animals and birds, to establish public game preserves and bird reservations, and to prevent the importation of animals likely to become pests. In a similar way the Bureau of Entomology is aiding the states in maintaining a quarantine against the further spread of the gipsy and brown-tail moth, which have already proved so destructive in eastern New England, and is co-operating with the forest service in the war on forest insects.

The supervision of the federal funds granted to the state experiment stations has been committed to the office of experiment stations. These funds now aggregate \$1,440,000 annually, and are given to forty-eight states and territories. They are supplemented by more than an equal amount derived from the states and local sources. This office also has administrative control of the stations in Alaska, Hawaii, Porto Rico and Guam, for which congress annually appropriates over \$100,000. The operations of the sixty-five stations in the United States cover every phase of the country's manifold agricultural industries.

The purchase, testing and distribution of vegetable and flower seeds on the orders of congressmen, which originally was the largest function of the department, is now a minor administrative matter. Between six and seven hundred tons of seeds, in about 60,000,000 packets, were distributed the past season.

In its advisory capacity the department conducts a vast and varied correspondence. Besides this there are some large operations which have in them an important advisory factor. Such, for example, are the daily weather forecasts which are generally available to the farmers, as well as other classes of people, throughout the country. In this category may also be included the monthly crop reports, the national soil survey and the co-operative farm demonstration work in the southern states.

Many agents of the department are now giving much time to personally advising the farmers in the districts where they are located. Notable examples of this are the services of the department's road, irrigation and drainage engineers, who are now widely sought for as consulting experts concerning large, difficult or special problems which are not easily handled by the local authorities. In a similar way the office of experiment stations has had a broad influence on the development of the agricultural colleges, schools and experiment stations. The advisory work of the department shows an interesting development of a relatively new governmental function. It is evident that the people are looking more and more to the federal government as a broad, expert and impartial agency able and willing to give them advice on many important matters connected with their daily lives. With relatively little administrative control the government is thus able to exert a very great influence in the affairs of the people.

The technical, scientific and practical investigations of the department constitute a large share of its business and cover a very wide range. All the bureaus are engaged in this work and a mere list of the projects would far outrun the limits of this article. They include laboratory investigations in a number of sciences, field experiments in many states and territories, studies of natural conditions and agricultural possibilities on a broad scale, the exploration of many foreign countries for plants, beneficial insects, etc., the devising of means to defend the farmer against fraud or to protect him against the ravages of insects and diseases, economic studies relating to farm management, cost of crop production, etc., etc. Taken together they constitute the largest amount of definite and systematic investigation conducted under a single organization that can be found anywhere in the world. United with the similar work of the state experiment stations, they are accumulating a body of knowledge relating to agriculture which is already by far the largest contribution to the science of agriculture. In this way a broad, sure and permanent foundation for the future agricultural prosperity of the United States is being laid.

As a public agency for the dissemination of information on agricultural subjects the work of the department has reached vast proportions. During the year ended June 30, 1911, the department issued 1,953 publications, aggregating 27,594,877 copies. Many of

these are technical reports of scientific investigations published in small editions, but others are popular in character and are widely distributed. The series of brief farmers' bulletins is largely distributed by congressmen and thus is sent into all the rural districts. Over 9,000,000 copies of farmers' bulletins are distributed annually. The "Yearbook," a bound volume of about seven hundred pages, has an edition of 500,000 copies. Any person in the United States on application can be enrolled on the mailing list to receive regularly the monthly list of department publications, and thus can know about everything which the department publishes. It is the policy to send free of charge any publication the department has in stock and to reprint as long as there is any considerable demand. After that applicants are referred to the superintendent of documents at the government printing office, from whom any document can be procured at a nominal price. The department publishes summaries of its own publications, those of the state experiment stations, and all other literature of agricultural science published throughout the world in the journal entitled "Experiment Station Record." This is sent to numerous institutions and scientists and may be found in hundreds of libraries in this country and abroad. The department library contains about 116,000 books and pamphlets, chiefly on agricultural subjects, and currently receives nearly two thousand periodicals. This library is freely open to readers and books are loaned to agricultural colleges and experiment stations and other scientific institutions. The officers of the department deliver numerous lectures before farmers' institutes, agricultural, scientific and other organizations in all parts of the country. A vast amount of information is also distributed by correspondence and through the agricultural and general press.

The department, however, is not content with distributing agricultural information, but goes further than this and directly promotes agricultural education throughout the United States. It does this because it believes that in the long run the permanent prosperity of our agriculture and the highest welfare of our rural people, as well as of the whole nation, will depend on the trained ability of our farmers and their families to make the best use of our lands and to maintain well organized rural communities. The rural people, therefore, need a sound and thorough education which will adapt them to their environment and make them efficient workers

in the service of mankind. There should be a broad education for citizenship and life in the modern world, including a fair share of training in the science and art of agriculture and home economics. The department is, therefore, giving much attention to agricultural education.

The office of experiment stations is especially charged with the educational business of the department, but the other bureaus are also doing much to promote this cause. The work is largely done in co-operation with the United States Bureau of Education, the Association of American Agricultural Colleges and Experiment Stations, the state departments of education and agriculture. The general purpose is to collect and distribute information regarding the progress of agricultural education throughout the world, to study the agricultural and pedagogical requirements of a modern educational system for rural people, to aid the several states in broadening and redirecting their school system to meet these requirements, to supply the schools with the knowledge accumulated by the department and the experiment stations which can be utilized to make their courses in agriculture and home economics more satisfactory and effective, and to carry on propaganda, as far as may be necessary, among our rural people, in the interests of improved methods of education.

This work is done partly through publications, but more largely by public addresses and conferences with educational and agricultural leaders in the several states. It covers broadly the work of the agricultural colleges, secondary and elementary schools, farmers' institutes and other forms of extension work. The Bureau of Plant Industry is contributing largely to this latter phase of the educational movement by distributing seeds for school gardens and by forming boys' and girls' clubs for the growing of corn, canning of tomatoes, etc., in co-operation with the public schools in the South.

ORIGIN AND GROWTH OF RURAL CONFERENCES

BY CLARENCE SEARS KATES,
Pennsylvania Rural Progress Association.

This paper is to treat of the origin and growth of conferences on rural conditions, and as THE ANNALS are read by a special class, those whose tendencies are sociological, I wish to emphasize that aspect of the rural problem. To those who have considered the problem approaching it from the rural standpoint the terms are interchangeable almost to the point of identity. The rural problem is rural sociology.

The first meeting that may be called a rural conference was held in 1901 in Morris, Connecticut, and was called at the instance of Rev. F. A. Holden. The first large conference was held at the University of Michigan in 1902, under the combined auspices of the Michigan Political Science Association and the agricultural college of the university.

These widely separated meetings were the result of efforts to bring the specialist into close touch with the more general phases of rural life and to secure breadth and wholeness in considering the problem and assure well-balanced progress. The "problem" arises out of the fact that it has been generally forgotten that the nation's wealth comes from the soil. That truth became obscured in the United States due to the tremendous development of manufactures and mining, resulting in the development of the city and almost complete neglect of the country. What, therefore, can be done to arrest the deterioration of the rural forces, man and soil?

The scattered efforts made toward the solution of the question sprang into the dignity of a "movement" from three events. The first was the action of Victor Emmanuel III, King of Italy, who in 1905 called upon the governments of the world to send delegates to Rome to consider methods for the promotion of the interests of the rural population. Thirty nations sent delegates to this conference. The United States was represented by David Lubin, of California, to whose initiative the project was due. The call resulted in the formation of the International Institute of Agriculture. The king

has given the Institute a large endowment from his private funds and in consideration of its establishing its headquarters in Rome, has had a palace built for its permanent use. It seeks to ameliorate the conditions of rural life and is making a comparative study of the economic, sociological and financial institutions bearing thereon.

The next great event was President Roosevelt's creation of the National Conservation Commission in June, 1908. This body was requested to undertake the compiling of an inventory of the natural resources of the United States—the forests, mines, rivers and soils. This inventory was printed as a senate document and "is the first inventory of natural resources ever made by any nation, forming one of the most fundamentally important documents ever laid before the American people."

And lastly as contributory to the elevation of the problem into a movement was President Roosevelt's appointment of the Country Life Commission in August, 1908. The tremendous publicity given by the press of the nation to the current progress of the commission's investigations was of inestimable value. The public was continually having its attention directed to the work, with the result that a wide and deep impression was made upon the public mind. This was doubly fortunate, because the refusal of congress to arrange for the adequate distribution of the commission's report would have been largely successful in withholding the results of the investigation from general knowledge. The report shows the general condition of farming life in the open country and points out the larger problems; it indicates ways in which the government, national and state, may show the people how to solve some of these problems and suggests a continuance of the work the commission began. The Spokane Chamber of Commerce printed the report, as the small edition of the government's issue was soon exhausted. The report now is issued as one of a series of volumes in the Young Farmer's Library. The above is mentioned somewhat in detail to show the difficulties that the movement earlier had to contend with and yet how the inherent value of the movement forces itself forward.

I now append two typical programs of state conferences, one of the West and one of the East, and together they excellently serve to illustrate the value of this form of attacking the problem. It will readily be seen that the titles of the programs fall into four divisions—the home, the school, the church, the business.

PROGRAM OF THE MINNESOTA CONSERVATION AND AGRICULTURAL DEVELOPMENT
CONGRESS, 1910.

Introductory.

Opening Address—Clinton R. Woodruff.

The Agricultural Resources of Minnesota—The Most Rev. John Ireland.

Practical Conservation and Agricultural Development in Minnesota—Governor Adolph O. Eberhart.

The Public Domain and the Nation's Obligations Regarding Its Disposition—Richard A. Ballinger.

Minnesota: A State on the Eve of a Wonderful Future—Professor Albert F. Woods.

The Conservation of Our Soil—S. D. Works.

Elements of Wealth in Minnesota—P. V. Collins.

Conservation of the Home—Mrs. Margaret J. Blair.

The Government and Conservation—George Otis Smith.

Minnesota Peat: A Resource of the Future—Max Toltz.

A Classification and Use Survey of Minnesota's Resources—Professor Frederick E. Clements.

Agricultural Development in Minnesota—Howard Elliott.

The Farm Wealth of Minnesota—Professor E. V. Robinson.

The Conservation of Capital—James J. Hill.

Agriculture: A Science and a Competitive Business—Professor A. E. Chamberlain.

Minnesota's Past, Present, Future—Dr. Cyrus Northrop.

Soil Fertility as a Factor in Crop Production—Coates P. Bull.

The Farmer as a Factor in Crop Production—Professor A. D. Wilson.

Rotation as a Factor in Crop Production—Professor Andrew Boss.

Business Methods in Farming—B. L. Perry.

Beef, Cattle and Sheep in Minnesota—C. W. Glotzfelter.

"Pigs and Clover" in Minnesota—Forest Henry.

The Dairy Industry in Minnesota—Professor T. L. Haecker.

Advantages of Farm Life to a Woman—Mrs. Agnes Whitney Savage.

Co-operation and Advertising, the Key to the Settlement of Minnesota—D. M. Neill.

The Business Side of Farming in Minnesota—Professor John L. Coulter.

The Eve of a State-Wide Development Movement—George Welsh.

For Education, Progress and Poetry in Minnesota Farming—J. Adam Bede.

For Good Roads, Immigration, Agriculture in the Schools—Senator J. M. Hackney.

Industrial Education in the Country School—George F. Howard.

Public School Agriculture: How Taught and How Connected with the Business of Farming—Dick J. Crosby.

Agriculture in the Country High School—A. M. Duncan.

State-Wide Industrial Education—D. D. Mayne.

Education and Conservation—Governor John Burke.

Education and Business, A Study of Current Conditions—Professor Robert R. Denfield.

Conservation of Human Life—Dr. H. M. Bracken.
Co-Ordination in the Conservation of the Minnesotan—Dr. F. F. Westbrook.
Minnesota's Resources in Human Life—John S. Fulton, M. D.
Pure Food in its Relation to Public Health and Conservation—Dr. Harvey W. Wiley.
Women's Stake in Conservation—Mrs. Caroline Bartlett Crane.
Business Men and Good Country Roads—George M. Palmer.
Building Good Roads Out of the Material at Hand—George W. Cooley.
Highway Legislation and Administration—Robert C. Dunn.
Good Roads as a Factor in Conservative Development—M. O. Eldridge.
The Tar Treatment of Roads—Philip L. Sharples.
New Industrial Enterprises in Minnesota—W. O. McGonagle.
Forestry and Conservation in Minnesota—J. E. Rhodes.
Minnesota's Soil and Mineral Resources—Dr. Charles R. Van Hise.
Waste and Reparation—Henry Wallace.
Waterways and Water-Powers in Minnesota—Col. J. H. Davidson.
The Water Wealth of Minnesota—Francis C. Shenhon.
Canada's Example in Forestry—R. H. Campbell.
What Drainage Is Doing for Minnesota Agricultural Lands—George T. Ralph.
Northern Minnesota: A New Empire—Professor Thomas Shaw.
Farm Drainage as a Factor in Agricultural Conservation—John T. Stewart.
Practical Co-operation—E. N. Tousley.
The Conservation of Human Life—Dr. Edward T. Devine.
The Welfare of the Child—Mrs. Perry Starkweather.
The Garden School—Mary D. LaRue.
Conservation of the Moral Forces of the State—Professor F. E. Webster.
Resolutions.

TENTATIVE PROGRAM OF THE PENNSYLVANIA RURAL PROGRESS ASSOCIATION
COUNTRY LIFE CONFERENCE, PHILADELPHIA, MARCH 14, 15, 16, 1912.

Address of Welcome—The Mayor.

Response—Dr. E. E. Sparks, Chairman of Association.

Mr. J. B. Lippincott, President Philadelphia Society for Promoting
Agriculture.

Conservation of Country Life—Gifford Pinchot.

Address—Mr. Nathan C. Schaeffer, Superintendent Public Instruction, Pa.

Address—Hon. N. B. Critchfield, Secretary of Agriculture, Pa.

Country School Improvement (illustrated with the stereopticon)—O. J. Kern,
Superintendent Winnebago County Schools, Rockford, Ill.

Recreation for Rural Communities (illustrated with stereopticon)—Dr.
Myron T. Scudder, Professor of the Science of Education, Rutgers
College.

Federal Aid for Secondary Schools—Dr. T. F. Hunt, Dean of the College of
Agriculture, State College, Pa.

Discussion.

Rural School Education (with demonstration)—Miss Alice G. McCloskey, Lecturer, Rural School Education, College of Agriculture, Cornell University.

Libraries in Rural Districts—Hon. T. L. Montgomery, State Librarian, Harrisburg, Pa.

Federal Work in the South—Hon. O. B. Martin, United States Department of Agriculture.

Discussion.

General Topic—*The Railroad and the Farmer.*

R. C. Wright, General Freight Agent, Pennsylvania Railroad, Chairman.

B. H. Gitchell, Secretary Binghamton Chamber of Commerce—The Relation of the Commercial Organization to the Farmer.

D. A. Brodie, United States Department of Agriculture—Work of the Bureau of Farm Management.

P. H. Burnett, Industrial Commissioner, Lehigh Valley Railroad.

F. R. Stevens, Agriculturist, Lehigh Valley Railroad.

R. L. Russell, General Freight Agent, Philadelphia and Reading Railway—The Reading Railroad and the Farmer.

W. A. Burton, General Manager Eastern Shore of Virginia Produce Exchange—Co-operation.

Movements in Agricultural Extension—Professor H. E. Van Norman, College of Agriculture, State College, Pa.

Educational Value of Agriculture—Professor G. N. Lauman, College of Agriculture, Cornell University.

Boys' and Girls' Club Work (illustrated with stereopticon)—Hon. O. B. Martin, United States Department of Agriculture.

General Topic—*The Rural Church.*

Rev. C. O. Bemies, Pastor, McClellandtown Presbyterian Church, Chairman.

Rev. Warren H. Wilson, President, Board of Home Missions.

Rev. G. F. Wells, Federal Council of the Churches of Christ in America.

Professor Alva Agee, College of Agriculture, State College, Pa.—A Layman's View of the Country Church.

Albert Roberts, Secretary, International Committee of the Y. M. C. A. on County Work—County Work.

Discussion.

Appointment of Committee on Resolutions.

General Topic—*The Farm Home and Rural Sanitation.*

Isolation of Farm Life—Hon. A. B. Farquhar, York, Pa.

Home Economics for the Farm Home—Miss Martha Van Rensselaer, Professor Home Economics, College of Agriculture, Cornell University.

Women and the Grange—Dr. Hannah T. Lyon, Officer, Pennsylvania State Grange.

The Grange—Hon. William T. Creasy, Master, Pennsylvania State Grange.

Rural Sanitation—Dr. Samuel G. Dixon, Commissioner, State Department of Health, Harrisburg, Pa.

Clean Milk Production—Dr. C. J. Marshall, State Veterinarian, Harrisburg, Pa.

Adoption of Resolutions.

The Country Life Movement—Dr. L. H. Bailey, Dean, College of Agriculture, Cornell University.

Country Roads—Superintendent E. M. Bigelow, Department Public Highways, Harrisburg, Pa.

The Rural School—Professor Philander P. Claxton, Commissioner of Education, Washington, D. C.

The observer of sociological activities notes that when those topics are treated in conference in relation to cities, the classic instance being the *Pittsburgh Survey*, they fall at once into the sphere and attention, in fact originate, with sociologists. It must be so with the rural problem. The chief difference between the two activities is merely a more or less separation of the human units, urban, congestion; rural, segregation. There are great underlying principles connected with the rural problem that need the attention and deep study of the political economist. These conferences are, therefore, providing data necessary to be considered by those who are trained to hunt for the underlying social laws, and as such items are now being gathered with but little, if any, method, it is imperative that they be collated and examined to the end that what gaps exist, they be indicated. I believe it is quite within bounds to state that not since John Stuart Mill has any great economist, therefore lesser men, given proper attention to rural economics. Our schools, colleges and universities all need to direct the young students' attention to this question, so that when they go out in the world they will have some idea of the interrelation of *Rus* and *Urbe*. One result of these conferences is the forming of a group of young economists in the agricultural colleges who are specializing in rural economics.

One may call attention to another aspect generally overlooked, and that is the value of an agricultural education as being equal to the courses in the "humanities" as a means of culture in its fine sense. I append a curriculum which shows how broad is the training given and which naturally includes the two phases of education, the habits of concentration and observation, the former through the languages and mathematics and the latter in the sciences, quite lifting the agricultural training beyond the merely materialistic. The subdivision of the syllabus on rural economics has such familiar

headings as capital, labor, cost-production (quite a modern term), marketing, records and accounts.

SPECIMEN CURRICULUM

| | Hours. | | Hours. |
|----------------------------------|--------|-------------------------|--------|
| Algebra..... | 75 | Modern languages..... | 340 |
| Geometry..... | 40 | Psychology..... | 60 |
| Trigonometry..... | 40 | Ethics or logic..... | 40 |
| Physics (class-room work)..... | 75 | Political economy..... | 60 |
| Physics (laboratory work)..... | 75 | General history..... | 80 |
| Chemistry (class-room work)..... | 75 | Constitutional law..... | 50 |
| Chemistry (laboratory work)..... | 75 | | |
| English..... | 200 | Total..... | 1,285 |

Through the influence of these conferences several states have established country life commissions with appropriations for the work, an instance being California with an appropriation of \$100,000. The chamber of commerce in many cities have their committee on rural affairs. To the Spokane Chamber of Commerce is due the organization of a national conference on rural conditions held in 1911.

The writer in closing cannot but refer to those distinguished men who have been the early leaders in organizing these conferences. To President K. D. Butterfield, of Massachusetts; Dean L. H. Bailey, New York; Dean T. F. Hunt, of Pennsylvania; Professor H. C. Taylor, Wisconsin; Professor J. L. Coulter, of Minnesota; Assistant Secretary, W. M. Hays, Director A. T. True and Mr. D. F. Crosby, all of Washington, D. C., are largely due the honors for the success these meetings have attained.

PART THREE

Rural Social Problems

SOCIAL LIFE IN THE COUNTRY

BY WARREN H. WILSON, PH.D.,

Superintendent Department of Church and Country Life, Board of Home Missions, Presbyterian Church in the United States of America.

Social life in the country appears in the following forms, in the associations of the family group, in the recreative meetings which grow out of the experiences of labor, in the assemblies of people at the church, in casual public gatherings, not universal among country people, at the country schoolhouse, and most important of all, in the casual meetings of country people at their places of informal association. That is, country life is dependent upon the family group, the church, the school and the store for associative experience. In addition to this, the effect of labor itself is seen in certain reactions in the way of recreation.

Country life has been sifted by the influence of machine industry and of the railroad. The interurban trolley and other centralizing modes of transportation show that in the country there is left no way of getting a living except farming. The country community is dependent upon agriculture for its economic processes which are fundamental.

Moreover, country life is dominated by labor. No other aspect of modern life is so industrialized as country life. It appears that no one, broadly speaking, has remained in the country except those who stay there for a livelihood. The more enterprising, the bolder spirits, the more active members of the population, have been tempted away by the attractions of the city, of the railroad town, of the factory and of the mine. It is true that in some sections, especially of the older states, there is the remainder of an indolent population who live in the country because of lethargy, but such conditions are not prevalent throughout the country. The striking fact on which generalization should be based is that country life has been uniformly made industrial. It presents to the observer a wide aspect of hard labor, long hours and very slight modifications in the way of recreation or social pleasure. There is no leisure, and there is no leadership, broadly speaking, in country life.

This condition takes on a special form in those parts of the country which produce, as almost all parts do now produce, a staple crop. The farm land of the United States is mapped out by the demands of the market, according to the "money crop" of that region. The hard work of farming is thus systematized.

In the hop region, for instance, work is seasonal and the processes of labor are rigorously defined by the possibilities of the crop and the demands of the market. The same may be said of the wheat, corn or tobacco region.

Work in the dairy country is not so much seasonal, as it is systematic. The work for the various hours of the day is as rigorously prescribed to the dairy farmer as the work for the months of the year is for the tobacco farmer. Everybody in the dairy country goes to bed and rises, he eats and sleeps, he visits or goes to church, according to the exactions of the city market for milk and the physiological possibilities of the dairy cow.

This system on which farm labor is done regulates the social life in the country, according to the normal reactions of work and play. Broadly speaking, this interaction of work and play in any social population obeys a law: systematic labor reacts in organized recreation. Wherever there is a factory town, there is a playground. Wholesome and normal labor conditions produce, quantity for quantity, a normal and wholesome amount of recreative life. Workingmen generally turn after the hours of self-repression and minute regulation to play together. Wage earning involves long hours of involuntary labor. Its processes inhibit voluntary acts and forbid normal activities in self expression. As a result, when the hours of labor are over and the regulations of the factory are lifted, the worker turns to play. This play is generally organized, because the custom of systematic labor reacts in a greater self expression through organized, than through solitary activity.

The same rule dominates country life. Labor being universal, the craving for play is always universal. Allowing for a sifting out of the country population by a process which sends the convivial spirits to the city and the town, the result in the country is the same as in the city. The systematization of work in country communities reacts in a craving for organized recreation, which is the first influence in the social life of country communities.

Nothing impresses the observer of country people so much as

the uniformity of long hours at hard labor. We found in investigating these country conditions in four states that among country people the proportion of those who are regularly industrious exceeds ninety-two per cent. The number who are idlers or are irregularly employed is very small. Those who do not work, and work hard, are by the economic sifting of the population excluded from country communities. It is also true that in the country there is an increasing specialization and systematization of farm labor. The raising of staple crops has organized the open country into districts, and in these regions the whole year is allotted to certain processes. The hours of the day are regulated with little liberty for the farmer. All his time, broadly speaking, is assigned to the regular processes of his industry.

This uniformity of labor and increasing system among farmers would lead one to expect a reaction in the way of organized recreation, for in other sections of the population organized work leads to organized play. Social life is adapted to the system followed by labor, and social intercourse is stimulated by the very intensity with which men apply themselves to organized work. But in the country, if the same law works, its effect must be discovered in three ways.

First of all, the worker in the country takes his reaction in a solitary form. The play spirit does not in so far organize men in social life. Refreshment after labor does not stimulate, but rather diminishes social intercourse. These solitary recreations are hunting, fishing and similar sports, the total quantity of which, however, is bound to diminish as time passes.

Second. The working of this law of systematic play as a corollary of systematic labor doubtless expels from the country community the convivial types of men and tends to select for the country community the more staid and unemotional, the more austere and repressive types of men.

Third. The working of this law doubtless builds up in the large towns and villages an artificial social life, almost entirely commercialized, in moving-picture shows, saloons, billiard halls, lodge rooms, the quantity of which is greater in these towns and even in the villages, because it is excluded from the open country.

This concentration of social life in the large villages and towns and in the smaller cities is a striking fact in the country. I think

it is one of the most lamentable conditions affecting country life. To begin with, the farmer, while in the large town, is away from home and released from the customs and traditions of his own neighborhood. He is out of the inspection and away from the normal checks and obligations of his own community. The situation tends to a letting down of moral standards and to a loosening of scruples in regard to moral conduct. It tends also mightily toward the removal of the young people and the working people from the farm. If it be allowed that there is vital connection between work and play, it follows that the situation in which play is concentrated in given communities and work is distributed over other communities, the allurements of the communities in which recreation is provided will prove almost irresistible.

An economic factor entering profoundly into this situation is exhibited in the fact that large towns and small cities throughout the United States generally live not directly off the land about them, but indirectly through the middleman and the bigger cities. These towns in most cases have no market. The farmers of the country round about cannot sell in these towns the produce of their lands. For instance, in the town of Owego, N. Y., in Tioga County, which is a dairy county, the townsmen purchase their butter and dairy products from New York City. Every product of the creamery is priced in this community at a slightly higher rate than that at which it is sold in New York City. The result is that the social life and the religious life of Owego are divorced sharply from that of the country round about. Residents in the country either avoid Owego socially and religiously, or they give up the country and reside in Owego. There is no natural and normal intercourse between town and country.

In such a community, owing to this economic wall around them, it is noticeable that the land within two miles of the town limits is poorly tilled. The attraction of town life is such as to draw away from the farmer his hired hands, his son and his daughter for town work and town wages. Beyond the two-mile zone farming is better done and country life retains some of its normal aspect. Churches are better attended, granges prosper and hired men are found working on the farms. The fundamental cause of this social division between town and country is in the fact pointed out by Sir Horace Plunkett, that the characteristic American town

or small city does not buy its food from the country round about. The land within sight of the city streets of Clearfield, Pa., does not pay the taxes that are laid upon it by the state.

The most important indications of the social tendencies of the community are the casual meetings. Places of informal association have a greater value in socializing than the appointed meeting places of the people. Especially is this true in those communities in which there is no appointment of meeting. We discovered in the Pennsylvania communities that the places of casual meeting are almost exclusively places of trade, such as stores, barber shops, or places of public necessity, as railway stations and post offices. The frequency of meeting in these places occupies a proportionately greater rank than all other meeting places combined. Generally throughout these communities, in which the population is made up of farmers, there is no public and accessible center of association. Club rooms are not provided, lodge rooms are not open, and the casual constant meetings of the people have to be incidental to trade, travel or labor.

These casual meetings in the country community are, it is admitted, a wholly insufficient socializing experience. I desire to note them because of that fact, and as a means of showing further that they impress themselves upon rural society in intensifying the purely economic character of it. The fact that in the country community people meet nowhere except in the store or post office, the railroad station, the blacksmith shop, the grain elevator and on the sidewalk, saturates the social mind with economic commonplaces. People are under the influence of the occasional small talk of buying and selling, of prices, and of the bare necessities of life. There is in these casual meetings little of politics or religion and nothing of art, literature, social reform. The substance of conversation and discussion in such meetings is conditioned by the environment. Traditionally, the farmer talks politics at the country store and discusses religion in the post office; actually, he talks in the store butter and raisins and horses and harnesses and the commonplace experiences which would naturally suggest themselves in a country store. There is, indeed, an occasional tendency, dependent largely upon personalities, to launch into the two fields of politics and religion, but it is doubtful whether the political or religious discussion under such auspices is of value to the state or to the church. The environment of the discussion would probably prevent it.

A factor of increasing consequence in the country is the growth of class consciousness. The country population is rapidly changing in its personnel. Speculation in land is for the present a dominating economic experience in the country. A most extensive change in land ownership is going on, resulting, it is to be hoped, in "the farms passing into the hands of those who will till them to the best advantage." Its present and immediate effects are an injection into the country community of alien human material. Four farmers out of ten throughout the United States are renters. If these tenant farmers were a permanent factor in the rural personnel, the condition would be serious, but they have only a one year's lease on the land. In consequence, their relation to the country is but temporary. The place they occupy in the country population is not measured in terms of their personality, but by the land they till, so that the intimacy of social intercourse in the country is diluted still further by this fluid element poured into the veins of the community through the one-year lease system.

Remembering now, that through machinery the number of people who work in the country is diminished, it is obvious that the old warmth and the one time high intelligence of social intercourse in the country, based upon the industry itself, are much lessened. Unfortunately, the class distinctions in the country do not attain to genial or attractive stages. The country church exhibits this in the fact observed in Pennsylvania that when there is but one class in the country and all men live on the same level, sixty-four per cent of the country churches grow and thrive. When there are two classes in the country who do not eat and drink together, who do not intermarry and who live after differing social modes, only thirty-four per cent of the country churches thrive. But in those communities into which more than two classes have come, sixty-eight per cent of the churches thrive, and increase in membership. This indicates, I think, that the difficulties of social life are at the very greatest when a class distinction first separates country people and in the same community are two modes of social intercourse. In the country community everybody must know everybody else. Men are accustomed to meet weekly and almost daily. Under such conditions, if there be a check upon free intercourse and a limit to the degree of human intimacy on fixed and defined bounds, it has a worse and more hostile effect than

the elaborate distinctions have in the city; for in the city men can select their acquaintances. In the country, a man's whole life is lived, except for a few experiences, in the boundaries of the rural community. The division of the country community into two classes, among a people already diminished or confined by the gravitation of the country life to intercourse with one another, results in a very lamentable state of social feeling and gives to country life a forbidding social aspect.

Coming now to the three institutions worth naming which are general throughout the country, the school, the church and the household, we must recognize that in these three is expressed the American conception of country life. The type of American life on which our ideals have been based and to which our laws have been conformed, the economic type which was apparently in the mind of the writers of the Constitution of the United States, is the type of the household farmer. This economic type is expressed in the residence of the farmer on his own land, which is tilled by the economic group made up of the farmer, his wife, his children and immediate kinsmen. It includes also the hired man and sometimes a hired girl, though the hired man is increasingly difficult to secure and the hired girl has become little more than a tradition.

The one-room school in the country is the institution suited to the economic process of household farming. It is organized on the principle that a minimum of education is needed since the household is sufficient unto itself. The same principle explains the weakness and insufficiency for modern life of the country church. It results, therefore, that the one-room country school makes nowadays, when household farming is a weakened economic mode, little provision for social life. In some districts the school has a few gatherings. In a very few places throughout the country the parents have a custom of meeting in connection with the school, but generally speaking, the teacher's one motive is to earn her insufficient wage. In most cases the teacher never returns for a second year in the same community and the country school is not throughout the United States a social center.

Brilliant exceptions to this statement may be cited. It is more important, however, to recognize the general condition, which is so general that I think it should be taken as an indication that with the alteration of the economic mode in the country and the passing

of the period of household farming, the country school, which was suited unto that period, has been discredited. It appears to have lost the confidence of the farmer. He is not eagerly looking for a better method, but he has ceased to repair the country school and he employs the teacher chiefly because he has to, using little discrimination and having little enthusiasm in the process. It follows, of course, that the country school is an institution of little dynamic value in the country. Without a radical adjustment to country life it cannot be relied on as a center of social life. Those instances in which one-room country schools have been social centers are explained by the personality of the teacher; and we have not a sufficient number of brilliant personalities to lift the institution to the new plane.

The country church, which was erected by the household farmer and adapted to his mode of life, is but little better. Fortunately, it has the advantage of the school, in that it is the place of accustomed meeting for people of all ages, of both sexes and, theoretically, of all classes in the community. Its social value is somewhat intensified also by its conformity to the social cleavage of the community. Unfortunate as it may be, the churches in the country have been churches for land owners, churches for tenants, churches for Scotch-Irish, churches for the Pennsylvania Germans. Wherever there was a social distinction of which the people have been conscious, it has built itself a church. This condition, lamentable as it is from the point of view of progress, is in static respects an excellent thing for the country, for it has intensified the social consciousness of the people assembling with those of their own class for the worship of God.

The state of social life which is thus so easily explained, in which the church is an expression of the social cleavage of the people, is from the point of view of progress lamentable. Social life in the country is divided by the very institutions which express its idealism. Country communities are split up in so far as the church can register their cleavage into little groups whose only significance is some doctrine now forgotten, or some racial origin now little regarded. The churches in the country are far too many in number. They become the vehicle of expressing grudges, resentments, narrow and mean social feelings and the facility of division among them makes them the exponent of all the unworthy and retrograde forces in social life.

The story of this overchurching of the country has been so often told that it need not here be repeated. Examples like the town in Pennsylvania, in which within a four miles' drive of a given point in the open country are twenty-four country churches, are numerous in all parts of the country, though this particular instance is the limit. I do not know a worse one. In a Michigan group of villages, the whole population of which is seventeen hundred, there are fifteen country churches in which thirteen resident ministers are at work. The tendency of these churches is to keep the towns divided, mean-spirited and socially trivial. Among all religious people the ideal of union and federation is growing. Nothing will be more difficult than the accomplishing of this federation, but there is no hope for the country without it. The same spirit will result in co-operative organizations of the farmers and in the centralizing of the schools, but even when these two great reforms have been effected, it will still be necessary for the churches to work out their own problem of federation.

Social life among all these churches is in a certain sort general, but it is thoroughly commercialized. The providing of sociables, oyster suppers, church dinners and occasional lecture courses is a function in which the churches quite generally lead. The motives for doing this are identical with the motives of the lodges in the small towns, which also provide some commercialized social life. It is the motive of making money for the organization. The price mark is on everything connected with these fairs and sales and suppers, and at this point the churches are restless. The men of the churches are dissatisfied with the bad business done by the organizations which provide social life so adulterated. Most of these are women's organizations.

It is to be said, however, that in communities where so few meeting places are provided by any one, these social enterprises of the women of the country churches have great value. The fact that they are commercialized does not discredit them wholly. There is a general tendency to explore the possibilities of recreation as an ethical utility, and somewhat tamely the churches are attempting that which the Young Men's and Young Women's Christian Associations are doing with determination and assurance, namely, the harnessing of the play spirit that it may do the moral work of the community. If the sociables, fairs, sales and suppers by

which country churches pay a part of their expenses could be put upon a self-respecting basis, and if the system could be greatly extended so as to render a service adequate to the needs of the community, not merely to the needs of the churches, it would have extraordinary value, for what is needed in the country is the development of normal social life under the supervision of the church and the school. These are the two responsible institutions for building up the social structure of country life.

The home should hardly be called an institution. Its processes are instinctive rather than intellectual, especially in the country. The rural household is founded in sentiment. Its life is surrounded with reserve and its integrity is sternly guarded by the strong individualism and independence of country people. The rural household is the fortress and the citadel of American self-respect, and it is therefore almost impossible to affect with any direct influences the good or ill of the country home. Only through the church and the school can influences be made to reach the rural household through the slow course of years, and by the devoted service of teachers and ministers.

But it must be clearly understood that economic processes have undermined the traditional country home. We still hear a good deal of loose and sentimental idealization of the country home, but country people know well that the old-fashioned rural household has disappeared. The tendency of the farmers to retire to the towns, which in the great agricultural states has removed one-half of the land owners from the open country, has done much to break up the country home, because a part of the rural household was its possession of a warm, neighborly atmosphere. The departure of the young men and women to seek their fortune in the city, on the railroad or in the factory towns has dissolved the rural household. The very process which in the city and factory populations is compacting the home is at work in the country dissolving the home. The picture at the World's Fair in Chicago in 1893, "Breaking Home Ties," was a classical artistic expression of this lamentable and pitiful process. So far in the open country there has been no economic reconstruction on which the household can be built. Without this reconstruction the rural household, which is the center of social life in the country, cannot be firmly built. Its present weakness is the truest expression of the dilapida-

tion, confusion and weakness of social life in the country. The church and the school in the country should be reconstructed for the purpose of restoring a normal social life, and the test of the success of this process shall be the building of a new country home in which men shall dwell at peace, permanently contented, the son succeeding his father, the daughter contented to remain for her lifetime in the country community. It is useless to commend educational, religious or merely social changes for the repair of rural social life. The fundamental change must be economic, and the farmer must learn by better educational methods how to produce from the land a great abundance, in order that there may be a larger profit for himself and cheaper prices in the city. This scientific agriculture is necessary also for conserving the fertility of the soil.

But scientific agriculture is not teaching the farmer to get himself a better profit. To this end co-operation among farmers is necessary. Certain measures are necessary also that look to the elimination of the middleman so far as possible. The parcels post, the providing of public market places in the larger towns and smaller cities are just as necessary as scientific farming and co-operative organization of farmers. By this means a satisfactory income will in time be secured by the farmer, and when farmers see that their income will be proportionately increased along with the increase of the total product from the land, then the farming population will take courage to practice the biddings of the agricultural scientist.

Social life thus anchored in a secure, profitable and permanent agriculture may be built to this end around the existing institutions in the country, the church and the school. Generally, the schools should be consolidated and centralized so far as possible in the open country. How far this centralizing of country life will be done in the towns and villages one cannot at present say, but it is for the good of the farmer generally that the centralization of the schools in the country be independent of town and village domination. It is important to make clear that the centralizing of schools will not itself follow from economic welfare. It must be done by the school men and is a task to be accomplished by itself.

Another task which will not come automatically as a part of

rural welfare is the reconstruction of the country church. This again is a task for the church men of all denominations. When the church and the school in the country, assisted by the grange, the rural Young Men's Christian Association and other institutions whose influence is great in those territories in which they are organized, have come to their best, then rural social life can be restored to its genial and kindly and humane aspects. But without this thorough-going reconstruction country life will continue to deteriorate so far as our present knowledge goes.

THE RURAL CHURCH

BY GEORGE FREDERICK WELLS,

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in America.

Social organizations which maintain religious worship and thereby purpose to embody and develop the religious and moral life of communities having not more than 2,500 inhabitants, may be called country or rural churches. Churches in the open country located in the most rural of districts where there are no villages belong to this class. Such are chapel churches by the cross roads, and those in agricultural hamlets and in villages and towns which have small manufactures, high schools, the beginnings of wealth and a degree of social selection. It is becoming less true that a church must be made up of farmers in order to belong to the country church class. More and more people employed in cities are seeking country homes and the open-hearted cordiality of rural worship. On the other hand, well-to-do rural people are bringing their church life to conform to the town or urban type. Many country churches are made up exclusively of people who work in factories, mines and quarries, or who engage in commercial pursuits. In general, we may say that country churches are those in communities where rural conditions persist and dominate.

The first decade of the present century has witnessed a rapid increase of attention to the functions and problems of the country church. In all ages the evangelists of religion have been the pioneers, not only of religious teachings in newly settled territories, but they have been the pioneers of organization for all forms of social work. The increase of attention to organized religion among rural people is not only a recognition of the great power and importance which the institutions of religion have attained, but it shows a deepening sense of need that we make sure that the country church shall not lose her place and leadership in the social advance of modern civilization as a whole. What are the marks of progress in the field of the country church?

I

We are approaching the time when it may be said that we have a literature on the subject of the country church. The following books have been written which, if taken together, give one a view of the present situation from the literary standpoint.

The leading book thus far upon the religious phase of the country church problem is "The Country Town," by Rev. Wilber L. Anderson (Baker & Taylor Co., New York, 1906). Kenyon L. Butterfield's "The Country Church and the Rural Problem" (University of Chicago Press, 1911) is a most helpful and inspiring treatment of important phases of the question. "The Church of the Open Country," by Warren H. Wilson, Ph.D. (Missionary Education Movement, New York, 1911) as a textbook for use in classes of young people, will prove most helpful. "The Day of the Country Church," by Rev. J. O. Ashenhurst (Funk & Wagnalls Co., New York, 1910). "Rural Christendom," by Charles Roads, D.D. (American Sunday School Union, Philadelphia, 1909), and "Institutional Work for the Country Church," by Rev. Charles E. Hayward (Free Press Association, Burlington, Vt., 1900) are the three books which come nearest to setting forth the country church problem from a distinctively church point of view. No country church book-shelf would be complete without three biographical books of rare merit. They are Professor E. S. Tipple's "Some Famous Country Parishes" (Eaton & Mains, New York, 1911), Rev. A. F. Beard's "The Story of John Frederic Oberlin" (Pilgrim Press, Boston, 1909), and the "Letters and Memories of Charles Kingsley," by Fannie E. Kingsley (J. D. Morris, Publisher, Philadelphia).

Other books which have decided value in this field are "Chapters in Rural Progress," by Kenyon L. Butterfield (University of Chicago Press, 1908); "The Rural Life Problem of the United States," by Sir Horace Plunkett (Macmillan Co., New York, 1911); "The State and the Farmer," by L. H. Bailey (Macmillan Co., New York, 1908); "Quaker Hill, A Sociological Study," by Warren H. Wilson (156 Fifth Avenue, New York, 1907); "The Country Life Movement," by L. H. Bailey (Macmillan Co., New York, 1911); "Rural Versus Urban," by John W. Bookwalter (Knickerbocker Press, New York, 1910) and "The Vision of New Clairvaux," by Edward Pearson Pressey (Sherman, French & Co., Boston, 1909).

The fourth volume of the "Cyclopedia of American Agriculture" (Macmillan Co., New York, 1909), which embodies the sociological portion of that monumental work, has not yet had its full use by those interested in promoting the interests of the country church.

The most complete country church bibliography thus far published is "Writings on Practical Country Church Problems" in the *Homiletic Review* for August, 1909 (Funk & Wagnalls Co., New York, 30c); a more recent list is "A Select Bibliography on the Country Church," (*Gospel of the Kingdom*, November, 1910, Bible House, New York, 5c). "A Selected Bibliography on the Country Church Problem," which is an annotated list of writings prepared by a committee of The New England Country Church Association (Prof. H. K. Rowe, Newton Centre, Mass.), is a third valuable help to the student of the question.

II

A beginning has been made in the application of the scientific method to the study of rural religious conditions and problems. It may be stated as a rule that the rural problem approaches solution, from one standpoint at least, only in so far as use is made of the scientific method.

In this connection, recognition must be given to the invaluable services of Rev. Henry Fairbanks, Ph.D., of Vermont, who, in 1886, made reports of first-hand investigations in his native state which surpass in value the mere house-to-house canvass and statistical reports given in denominational year books. In fact no reports of investigations thus far made are more interesting than these.¹

Samuel W. Dike, LL.D., of Massachusetts, by a series of articles published in the *Andover Review* on the religious problems of country townships did a piece of practical sociological work which has not yet been surpassed.² Rollin Lynde Hartt and President William DeWitt Hyde of Bowdoin College, by their writings and practical interest gave great encouragement to the movement toward an intelligent analysis of the causes of rural decline and the means of wholesome living in the face of deplorable odds due to the necessity of meeting new conditions.

¹ Two pamphlets, "*The Needs of the Rural Districts*" and "*The Problem of the Evangelization of Vermont*," may be secured by writing to Dr. Fairbanks, at St. Johnsbury, Vt.

² See *Andover Review*, August, 1884, January, June and September, 1885, for this valuable series.

We are able to-day to report some advance upon these early New England beginnings. The Department of Economics and Sociology of the Carnegie Institution at Washington, in 1906, reported some valuable facts and conclusions from rural social studies³. The Country Life Commission appointed by President Theodore Roosevelt in the last year of his administration did work which marked an epoch in rural interest.

In 1909, an investigation was made of overlooking and overlapping among the churches of Colorado. This was one of the first of the investigations made by the Federal Council of the Churches of Christ in America in its capacity as a central congress for the promotion of social and religious work by more than thirty leading Christian denominations.⁴

The Board of Home Missions of the Presbyterian Church in the United States of America, by studies made under the auspices of its Department of Church and Country Life is making a leading contribution to the scientific observation of life in the open country. Though these investigations are made under church auspices they bear the economic point of view. The Federation of Churches of Wisconsin, in 1910, reported the beginnings of one of the leading country church investigations yet to be made.⁵

III

The third mark of progress in the field of the country church is found in an increasing number of active organizations and associations, the purpose of which is to help the church to its vital place in rural community welfare. One of the first of these is the New England Country Church Association of which Professor T. N. Carver of Harvard University, is president. It holds annual gatherings for conference and free expression of opinion and conviction in regard to the best means of meeting country church problems.

The County Work Department of the Young Men's Christian Association, which has about seventy-five international, state and county secretaries employed and equipped at an annual expense of about \$350,000, is working by various means, in co-operation with the churches as far as possible, to discover, train and enlist

³ "The Country Church and Its Social Problem," in *The Outlook*, August 18, 1906.

⁴ "Co-operative Advance in Home Missions," Federal Council, 215 Fourth Ave., New York.

⁵ H. A. Miner, Madison, Wisconsin.

leadership for active social work in rural counties and districts. *Rural Manhood*, the publication of this association (124 East 28th Street, New York), is proving of great service to many rural workers.

Pennsylvania Rural Progress Association (Mrs. E. E. Powers, Pennsdale, Pa., Secretary) and the Illinois Federation of Country Life Progress (Miss Mabel Carney, Normal, Illinois, Secretary) as well as the Laymen's Christian Federation of Maine, are private associations which seek the co-operation of the churches with the schools, the Grange and other organizations in rural community building. These and other similar societies are exerting a leadership of great service in showing the possibilities of co-ordination and co-operation in which the country church should take a large part.

There are several inter-church federations of states which are co-ordinating the work of rural churches, remedying overlooking and overlapping and educating the clergy to the sociological point of view in their service. The problem of adequate support of country ministers is also being considered by some of these. The leading of these are the following:

The Massachusetts Federation of Churches, under the leadership of Rev. E. Tallamage Root (53 Mt. Vernon St., Boston Mass.) which publishes the periodical *Facts and Factors* and is making social surveys of typical rural communities. The Federation of Churches of Wisconsin of which Rev. H. A. Miner, of Madison, Wisconsin, has been the chief promoter, and the Nebraska Federation of Churches with Rev. P. F. Wigton, of Elgin, as executive secretary, are the leaders of this work in the Central West. Maine, Vermont, Rhode Island, New Jersey, Pennsylvania, Ohio, West Virginia, Illinois, North Dakota, South Dakota, Colorado, California, Washington and other states are rapidly developing their work under strong executive committees who are choosing secretaries for the promotion of their service. On a comprehensive scale the Home Missions Council and the Federal Council of Churches of Christ in America, are exerting force, hitherto unknown in the whole history of Missions toward the effective re-direction and stimulation of the more than 2,000 district superintendents, missionary bishops, conference secretaries, convention missionaries and 70,000 or more country pastors who are working in various

parts of the United States, all directly associated under the leadership of these inclusive movements.

The Neglected Field's Campaign of the Home Missions Council, in twelve or more states in the Home Missionary Territory of the Northwest taken by itself is an effort of infinite promise.

There are some distinctive church associations which are getting at the problem more directly. It is a decided advance when the churches as such recognize and utilize their capacity as the most effective of associations. The Department of Church and Country Life of the Board of Home Missions of the Presbyterian Church has already been mentioned. Rev. Warren H. Wilson, Ph.D., 156 Fifth Avenue, New York City, is its superintendent.

Mr. E. L. Shuey, of Dayton, Ohio, is chairman of the Committee on Country Churches of the United Brethren Conferences of his district. The Committee on the Study of the Rural Church Problem of the Pacific coast, of which Rev. A. E. King, North Yakima, Washington, is chairman; the Committee on Rural Life of the Oklahoma Conference of the Methodist Episcopal Church, of which Rev. B. C. Wolf, of Kildare, Oklahoma, is president; the Committee on Rural Conditions of the Baptist State Conventions of New York, of which Rev. R. A. Vose, of Owego, New York, is chairman; the Country Church Commission of Cleveland District, East Ohio Conference with Rev. N. W. Stroup, of Cleveland as president; the Committee on Rural Churches of the United Presbyterian Church, of which Henry Wallace, LL.D., of Des Moines, Iowa, is president, and Rev. J. O. Ashenhurst, of Pemberville, Ohio, is secretary, and the Bureau of Field Work in Christian Sociology of Drew Theological Seminary, of which Professor Edwin L. Earp, Ph.D., of Madison, New Jersey, is director, are among these organizations.

IV

The fourth mark of progress is indicated by the change of emphasis in recent work for country betterment. It is not considered that the greatest leader in the rural movement is the man whose secretarial position is most lofty or territory most extended. Instead, the greatest leader is the person who has laid the deepest foundation and built up the best rural life in particular parishes. The emphasis is rapidly being placed upon the local pastor, church

and geographical unit. The publication of the story of John Fred-
eric Oberlin has had an excellent influence in this direction.

Articles like "A Study in Local Church Federation" in the
Methodist Review, for July, 1910 (150 Fifth Ave., New York,
40c); "How a Country Church Found Itself" in *World's Work* for
August, 1911 (Garden City, N. Y., 25c) and "Modern Methods
of Church Work," by the Missionary Education Movement (156
Fifth Avenue, New York), indicate the growing prevalence of
this emphasis.

The Home Missions Council has undertaken to ascertain facts
concerning every rural and country neighborhood in the United
States. Rural life as a whole cannot rise higher than its most
needy though smallest social unit. "A Social Survey for Rural
Communities," a social analysis and manual for the study of even
the smallest of social units, as well as outline of possible activities
for the growth and development of communities as published by
the Federal Council of the Churches of Christ (215 Fourth Avenue,
New York) further emphasizes this wholesome tendency.

The two leading practical questions which have arisen in the
country life movement as it relates to the church are, first, what
is a normal program for the country church, and second, how shall
an adequate working analysis of a rural or country community be
made from the standpoint of the church. The latter question is
answered by, "A Social Survey," which has just been mentioned.
The first question is answered by the following outline. Both of
these show the place from whence the movement as a whole is now
anxiously looking for results. The Agricultural College, the
Grange and the country school are more awake to the present rural
situation than is the Home Missionary Society; the Missionary
Society more active than the theological seminary; and the semi-
nary more advanced than is the country church itself. The next
ten years will see a decided reaction in behalf of a changed rural
life made up of a countless number of highly developed and alive
country churches and parishes.

The following program indicates the steps to be taken by the
country church in its community service:

1. *Individuality*.—Every person has a religious and moral
faculty. Likewise, every country community needs and should have
the church. The church being the organ or faculty of the com-

munity for the spiritual life, there can be no true community life without the presence of the church and its ministries. It is the business of each community, in co-operation with the church at large, to provide the equipment to facilitate the expression and growth of the religious life of the community. This equipment is to include an energetic minister for the administration of the church, the preaching of the gospel and such leadership in community life as shall secure its highest spiritual welfare. In determining its relationship to the resources and problems of the community, the church may need the assistance of a scientific survey of its field.

2. *Service*—Churches' Work.—The country church, in common with all other churches, being an institution for realizing the moral and religious welfare and betterment of society, in the systematic exercise of its functions, provides for pastoral visitation, evangelism, temperance and other moral reforms, religious education and missions.

3. *Fellowship*—Churches Work Together.—Where country churches are related geographically to other churches in the same community, these churches in maintaining their internal integrity will mutually practice some method of inter-church unity whereby the comity, the inter-church association, the maximum service federation, or the one-minister federation will be realized, or they will, if the spiritual interests of the community need it, voluntarily proceed to form a single comprehensive church.

4. *Association*—Churches Working Together Co-operate.—Country churches in proportion to their inherent capacity to maintain a mutually helpful community relationship will be in vital and co-operative touch with the necessary social interests, movements and institutions in the community. Thus will be realized what is commonly known as the federation of rural social forces. By this means the church will inspire or promote when necessary: (a) The improvement of schools and their consolidation where needed; (b) Co-operation with the Grange and all movements looking toward better farming; (c) Needed recreations; (d) Public health and better living conditions. The fundamental social institutions thus federated will be able to eliminate the associations which unnecessarily exhaust the community resources.

5. *Substitution*—Churches Working Together Socially Substitute.—In instances where the structural and essential institutions

and agencies of a community are not fulfilling their functions, and cannot by direct personal means be stimulated to accomplish them, the church may temporarily and in behalf of needy classes, such as the marginal people, perform these functions by so-called institutional agencies.

6. *Unity of Solidarity*.—The Church is the religious and moral aspect of the whole community. We should keep to the few primary social institutions, bringing each to fulfill its function for the entire community rather than to multiply those which can serve only its unrelated parts. Every part of community life should be vitally related to every other part. The country church, when its internal, federal and community relations are normally realized and local solidarity is attained, will do its part in maintaining the vital equilibrium of all helpful community factors.

7. *Extension*.—The country church is vitally related to the church and society everywhere. In the face of needs and problems which cannot be met from local resources, the church may supplement its own strength by co-operation with non-resident forces. It is often advisable for the local church to secure the aid of specialists in the solution of difficult problems.

RURAL WORK OF THE YOUNG MEN'S CHRISTIAN ASSOCIATION

BY ALBERT E. ROBERTS AND HENRY ISRAEL,
Secretaries of the International Committee of Rural Young Men's
Christian Associations.

The county work, or rural department of the Young Men's Christian Association seeks to unite in a town, village, rural community, or in the open country the vital forces of young manhood for self improvement, physically, socially, mentally, and spiritually, and to give expression to these resources in community life for the betterment of others.

The Field.—It considers its legitimate field to include all communities that are too small to maintain the city type of Young Men's Christian Association work, generally conceded to include towns of four thousand and under. Experience has proven that its best work is done, however, in communities in which the rural environment dominates the community ideals. It therefore is a movement which must be determined from the standpoint of qualitative rather than quantitative values. There are 45,000 such communities in the United States and Canada with a combined population of boys and young men of over 12,000,000, thus including over sixty per cent of the boyhood and young manhood in this field. There are 2,000 counties considered organizable in the United States and 500 in Canada on the present basis of organization and type of work.

Its Beginnings.—The rapid development of the general Young Men's Christian Association movement, which addressed itself principally to the young men and boys of the cities, precipitated a general demand for work in small towns and country districts; but no constructive program was conceived until 1872 when the Association pioneer, Robert Weidensall, organized the first rural Young Men's Christian Association, in DuPage township, Will County, Illinois. In 1873 the supervisory aspect of the rural work was demonstrated in the voluntary supervision undertaken by a business man in Mason County, Illinois, who encouraged and supervised the

work in seven or eight small communities, which gave rise to the possibilities of what became known as the "County Work" with an employed secretary in charge. It was at this time that the experimentation with small town work under county-wide supervision began, but not until 1906 was it sufficiently developed to be officially recognized as a department of the International Committee.

County Work For County-Wide Co-operation.—The term "county work" is applied to this movement because the county affords a ready geographical unit for constructive work. Counties have distinctive traditions of their own, social elements, and existing organizations of a county-wide character. As the result of repeated failures in individual communities apart from other communities, a county-wide organization, commanding the combined resources of men and money within a county, made possible in community life that which could not have been accomplished independently.

Efficiency in Organization.—There are two factors that enter into this plan so essential to success—volunteer effort and expert supervision. The voluntary organization, the county committee, consisting of from fifteen to twenty prominent business and professional men and successful farmers, constitute the administrative unit and clearing house for policies and programs for the county-wide activities as well as for individual communities. These county committeemen are selected with great care, primarily meeting one of two qualifications: to be able to command resources of their own to promote this work for a period of years, or to possess such influence as to command the resources of others, both in time and money. They all must stand for the best things in community life, be vitally related to the church, to the school and other agencies that make for community progress. They constitute a voluntary body not unlike the faculty of a university at one time, or the health board of the county in another instance, as the clearing house for a religious campaign at another time, as a voluntary body of commissioners to advance the specific interests of a county, and in no uncertain degree measure out their best judgment frequently along the lines of advancing the agricultural or economic interests. Therefore, the county committee assigns these various aspects of its work to sub-committees, each of which renders its reports at the quarterly meeting of the county committee which works in close

contact with the employed secretary and trained experts. The county committee is responsible for a budget varying from \$2,000 to \$6,000 annually secured by voluntary contributions, which enables it to employ a secretary who is a trained expert as their executive officer. Thus the work is correlated and co-ordinated and a central clearing house is established through which any community and every community may find help and counsel in promoting internal welfare. In many instances the county committee has thus saved a community from expensive and painful experiments that have been previously proven impracticable.

The County Secretary.—"He is usually the fittest type of the college man, often not only a college graduate, but also with some special training. He is a man who loves country life and believes in the country and has great faith in the immediate future of the rural districts. The county secretaryship is fast being supplemented with agricultural college graduates. He is usually a man of large capacity for leadership, with a broad knowledge of human nature and a fine friendliness as well as an earnest Christian purpose and a great longing to help country boys and young men to well developed Christian manhood."

He is in a real sense a community builder. As he is employed by a voluntary organization, his services and his largest contribution to a county will be in reproducing his expert knowledge and experience in volunteer service. Therefore, his primary task is to discover, enlist, train, and utilize leadership. He is also a servant. Pastors, Sunday School superintendents and teachers, public school superintendents and day school teachers, fathers and mothers, granges, farmers' clubs and institutes, women's clubs, and many other organizations seek his co-operation and advice. In the individual community, having discovered leaders and set them to work, he executes the plans and policies adopted by the county committee through volunteer leadership. His relationship is with the few men who are the leaders rather than with the masses. In addition to the county secretaries some of the older and larger counties are employing assistant secretaries, physical directors, boys' work directors, etc. There are now fifty such secretaries in forty-nine organized counties.

The Basis of Operation.—County work is not an attempt to build up a new organization in country communities. It recognizes

as the primary institutions of the community the home, the school, and the church. Many other supplemental organizations are doing splendid work, but the aforementioned are recognized as fundamental. It is also a fact that though these are the primary institutions, they are in many cases functioning inadequately, or have ceased to perform their function entirely. Again, in the supplementary organizations which are found in country life many are overlapping and even working at cross purposes. There seems to be no well defined or unified policy. Furnishing a common platform upon which the various interests of the people will find expression and where these interests can come together in a democratic spirit is the unifying task of the county work in the organized counties. It stands for the elimination of waste, for the interpretation of real needs after careful surveys have been made, for the assumption of specific tasks by specific individuals and communities. It gives itself to the awakening of a social consciousness, a getting together; it seeks to supplement and not to supplant. If it can persuade a virile type of a man to teach a class of boys in a Sunday School, or a leader to supervise the play and athletics of a school, or a farmer to give his boy a man's chance, it has made a contribution to the community life, and its leaders are as well satisfied as they would be if a new organization were formed.

Some Established Principles.—They may be briefly given as follows:

A task for every man and a man for every task.

A recognition of the resident forces as the redemptive forces.

The approach to the rural problem a community approach.

The recognition of the inherent value of country life in and for itself.

The maximum development of constructive forces in community life.

Trained leadership for community enterprises.

Deliverance from the enervating paternalism of the city.

To stem the tide which sweeps toward the city.

Adequate preparation and appreciation for the problems of the city by those who must leave the environs of country life.

Better health and sanitation in farm homes and country communities.

A redirected educational system which will fit for life in the country.

A more scientific type of crop production and farm administration as essential to greater satisfaction in rural life.

A wholesome development of the recreative life.

For the increased power of the church.

Co-operation rather than competition.

A standardizing of operation. Membership is based upon what is given in service rather than what is secured in privileges. And finally a dominance of Christian ideals in the character of the manhood and boyhood of the country.

The County-wide Aspects.—Two, three, and four months and sometimes more time is given to a careful sociological survey, which is made by an expert before any attempt is made to organize a county, revealing the real needs for work in the county. Upon the results of these surveys a comprehensive policy for a period of years is outlined. This involves co-operation with experts from agricultural colleges, extension departments of universities, not to do things *for* the people, but *with* them. Other agencies also co-operate in county-wide activities, as in boys' and men's summer camps, inter-county relay races, play festivals and athletic meets, corn-growing contests, short term courses in agriculture. Social service at the county and state fairs is finding expression in rest tents, day nurseries, first aid hospitals, and in many of the county fairs the management and conduct of the athletics has been taken out of the hands of unscrupulous professionals and turned over to the Association leaders, with most gratifying results.

Community Interests Conserved.—No real progress in community life can be made with any degree of permanence without commensurate progress of its material wellbeing, and in the rural communities particularly the natural resources play an important part in demonstrations showing the possibilities of soil production. This is shown in the corn-growing, poultry-raising, and fruit-growing contests, in the horticultural classes and demonstrations, in potato-raising, in dairying, reforestation, etc. For this work it is necessary to secure the help of experts at experiment stations and agricultural colleges, which always comes more than enthusiastically. One-day courses are set up in various communities. The county secretary accompanies the experts from community to community. In some of the regularly organized counties as many as fourteen and sixteen rural centers are organized. This forms a ready approach

to a discussion and a solution of the economic problems before the younger generation.

Supplementary Education.—The boy in the country needs to have his school education supplemented by various other educational activities. A more intimate knowledge of the natural sciences, practical rather than academic, is imparted through simple talks on astronomy, biology, botany, zoology, geology, and on mathematical subjects related to the farm and to the home. This training in practical mathematics covers cost, accounting, measurements of garden plots, of the height of trees, and other necessary practice in mathematics. An extensive variety of "Practical Talks" with demonstrations is also conducted.

Social Aspects.—Country-life experts are unanimously agreed that what the country needs is social life. The inherent organization germ of the Young Men's Christian Association is social. It takes isolated communities and brings them together under the county work plan; it brings isolated individuals together in groups; it brings communities together in play, in inter-community debates, in inter-community agricultural contests, and in inter-community church movements. It eliminates the tendency to social stratification or the formation of cliques, which result naturally from the lack of social direction. A many-sided program of social activities is carried out involving neighborhoods, various homes and families, boys and girls.

It should be said that while the Association is addressing itself to the boy and young man in the country, its work naturally includes the girls and young women, particularly in social activities. It also emphasizes the need of a harmonious and closely unified community social life.

Civic Aspects.—The great need of an agrarian representation in our government affairs is apparent. We are still dominated by urban aggression, and the indifference and lack of intimate knowledge of governmental affairs as they relate themselves to rural interests is largely responsible for this condition. The better acquaintanceship of the 25,000 young men and boys in organized rural Associations with the members of their state legislatures and with congressional representatives who are invited to address them upon matters of vital current interest, will do much to bring about an appreciation of their civic rights. The conduct of town meetings in

which bills are introduced and discussed, involving their own community needs, the value of telephone franchises, of the good roads movement, the parcels post, the rural free delivery, postal savings bank, problems of the tariff as it affects the farmer, these are all subjects to be discussed in the various groups of the young men and boys.

Rural Recreation.—Rural recreation is another great factor in achieving a healthy consummation of content and normal living. Here the boy needs a normal physical expression, again socialized, particularly in the games, such as baseball, or in relay races, where one runner depends upon the other for the success of the team. This team work will do much to bring about a neighborly spirit of co-operation and neutralize individualistic tendencies. Community play days and community carnivals in which every boy and girl, man and woman takes part have been held. In one instance ninety per cent of the entire community turned out to spend the day together, the girls in their particular games, the boys in baseball and out-door basketball, the smaller children enjoying sand-boxes and children's games. These are known as the great community play carnivals.

Under this head must also be considered the conservation of rural health. Sanitation, domestic and community, hygiene, etc., are taken into consideration; practical talks and illustrated lectures are given; the rural school teacher is encouraged and aided in organizing plays and games during the recess periods; Sunday Schools are brought together in athletic leagues; and many other similar efforts afford the rare opportunity to the county secretary in some genuine social engineering.

The Home.—The whole question of the home is vitally involved in rural community progress, which implies a more intimate knowledge of the needs of the home and the conditions that must be met before home life can be made satisfactory. Among the results of this better knowledge will be the further invention and introduction of labor-saving devices. The spirit of the home will be conserved by the development of a closer relation between parents and children and children and parents, and by the awakening in the minds of the parents of a need for boy-mindedness and girl-mindedness. Many parents' meetings are held where emphasis is being laid upon the comradeship and friendship of parents and their children, as

well as the need of inspiring boys and girls to a greater interest in the arrangement of the home and in conserving its spirit and orderliness. The important matter of sex hygiene is not overlooked in this domestic educational campaign.

Religion in the Country.—Real progress in country life cannot be made without the great spiritual forces, and therefore the Young Men's Christian Association puts first and foremost the spiritual motive in everything. It holds out no selfish incentive to those who would join in its efforts. The organization is based upon the getting together to do something for the community. Under the stimulating force in a well-trained and vigorous personality, the country boy is enabled to overcome conditions in which he finds himself, and in the overcoming develops his best qualities into a masterful manhood. The starting of Bible study classes, co-operation with Sunday Schools to bring the boy into a realization of a virile religious life and meetings in isolated neighborhoods by young men are some of the religious activities.

Much is being said these days about federation of the rural church, but there is an aspect of federation about which very little is being said. This is the bringing together of community forces, boys and young men, regardless of denominational lines, and the working together for a community program involving the entire realm of economics, education, social life, civics, recreation, the home, and the spiritual forces.

Conserved by State and International Organizations.—Twenty-two state and provincial committees of the United States and Canada have separate sub-committees on rural work and employ experts who maintain direct relationships to the county secretaries and county committees and who with their committees constitute a clearing house for the state. In similar lines the International Committee through its sub-committee on rural work employs five experts who are related to the various state departments and provincial departments of the United States and Canada, where a clearing house is maintained from a national standpoint. It is to this department that already requests have been sent from Great Britain, India, Japan, and other nations that are desirous of having the county work movement of the Young Men's Christian Association. The official organ of the movement, "Rural Manhood," is published by this committee.

A movement which commands the confidence of business men to the extent of a quarter of a million dollars a year at the present time, which enlists 2,000 leaders and committeemen and which reaches in its activities more than 25,000 young men and boys in 500 communities with 62 trained experts and 35 years of experience, is glad to share in a small degree at least in the present onward movement for country-life progress.

THE COUNTRY SCHOOL

BY HAROLD W. FOHRT,

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The discussions elsewhere in this book dealing with changes in rural population, industries and life in general, make clear to the reader that American rural life has for some time been in a state of transition. The old pioneer farmer is passing away with the last of the cheap lands, and the dawn of a new era is at hand. A gradual rehabilitation is coming to life in rural districts—a life which, in many sections of our country, had become sapped of its best social satisfactions, due to the industrial call of the city and the beckoning of the last new frontier. Those who have been exploiting the soil must give way before the husbandman farmer. He is soon to possess the land. When this comes to pass, the desertion of the rural community by the people who should furnish it both intelligence and vigorous life will end.

The factors entering into the socialization of the new rural life are many. But it is safe to say that none of these is more important than the rural school. For it is school education, after all, that must furnish the leadership so essential to the solution of the rural life movement. Without strong men and women imbued with the spirit of masterful action, and thoroughly prepared for their work in the redirected rural schools, there can be no satisfactory adjustment of rural life. Let no one be misled in this matter. The present propagandist movement, directed by educators and social philosophers speaking from the rostrum in college and university, can but direct the attention of the country folk to their needs and suggest present remedies; but the ultimate readjustment will come at the hands of the new generation of scientific farmers. Here is seen the great task of the American rural school.

Any form of education, to be effective, must reflect the daily life and interests of the community employing it. With us, agriculture is the chief primary industry; consequently our rural education must be agricultural in nature. By this is meant vastly more

than the study of agriculture as a school subject. The new school must give expression to at least two things: (1) Good, scientific farming, rendering ample returns for the labor expended; and (2) a rural social life satisfactory to those living it. This means, briefly, that farming as an occupation must be made at least as profitable as an equal investment would be in the city, or else it will be difficult to keep the best productive population on the farms. But mere commensurate returns on the money invested cannot hold them there. Daily life in the country must first be made more humanly interesting and wholesome. So long as this life is lacking in ordinary social satisfactions, people will go where they can get them. The rural school must aim to make better farmers and better helpmeets for these farmers, must make the occupation more remunerative, and the whole life more worth living and free from city domination.

There was a time when all our schools, town and country alike, had many more things in common than now. This was before steam and electric power gave us the great machine age with its greatly specialized city life. The first rural teacher was city-bred and city-trained, had city ways and sympathies, and brought with him to the country, a city course of study. But in the early days this was of little consequence; since even city life, so called then, was provincial in nature, in many ways scarcely more than an overgrown rural life. But times have changed. Our towns have become mighty centers of commerce and manufacture. The needs of city life have found expression in a course of study preparing children for the varied activities there, and all has gone well with the city. But what about the rural schools? They have gone right on, down to the opening of the present century, using a course of study formulated for children with city motives, with the natural result that vast numbers of farm boys and girls have been trained away from the country instead of for it.

The specific charge against the rural school is this: (1) It has drawn too much of its substance from sources foreign to rural needs; and (2) it has failed in other ways to keep pace with the demands of our rapidly developing agricultural life. The school has had its face towards the city. Much more, it has long been almost at a standstill. Says Mr. Roosevelt's Commission on Country Life: "The schools are held largely responsible for ineffective farming,

lack of ideals, and the drift to town. This is not because the rural schools, as a whole, are declining, but because they are in a state of arrested development and have not yet put themselves in consonance with all the recently changed conditions of life." The great task is to put the school in harmony with the needs, and time and place of present-day life.

Before the rural school can become rooted to the soil as the chief agency in this social-economic reconstruction, several important changes must be brought about. Chief among these may be named: (1) A thorough redirection of the subject-matter taught in the schools; (2) a general reorganization of the entire working staff of administrators, supervisors and instructors; and (3) the re-building, at liberal cost, of the entire school plant.

(1) Of first concern is the subject-matter taught in the school. The universal elements are naturally the same whether given in the country or the city.¹ In locality interests only is there great divergence. Country children are reared in their own peculiar environment. They find their consuming interests in field and meadow, in orchard and garden, and if led by teachers sufficiently prepared in rural education, will early grow up in love with nature for its own sake, as also with the farm and farm home, there to become content to live out their free and independent and wholesome lives.

Some of the subjects which have long held place in the traditional farm-school curriculum are fast yielding this place, having failed to express the activities and needs of the community. Or, at least, such subjects are now receiving an altered emphasis. New subjects of vital importance to rural progress are finding prominent places in the new course of study. Thus, nature study, elementary agriculture, manual training and domestic science, farm accounting, physical education, etc., are beginning to play an important part in the life of many progressive schools. Nature study must be considered a substantial background for the whole scheme of farm education. Agriculture develops as a concrete expression of the practical side of farm life. Manual training and domestic science teach an added dignity in household tasks, making these less arduous and giving a new and broader outlook on life.

¹ The several paragraphs dealing with the curriculum are reproduced in substance from a chapter on *The Community and the Curriculum*, prepared by the author for a book entitled *Educational Backgrounds in Rural and Village Communities*, under the editorship of Professor Joseph K. Hart, of the University of Washington.

In the main, however, the process of redirection is not so much one of adding new subjects to the curriculum as of putting a new leaven into the old essentials. Nature study, for example, may be taught at odd moments in an informal way from the first year to the time of beginning concrete agriculture, as a leaven in all the subjects. Lessons in literature and composition may very properly emphasize the beauties of nature in the farm environment. Geography and arithmetic, likewise, can make use of much that is near at hand and applicable to daily life. These schools are already teaching less of stocks and bonds, cube root and Troy weight, and more of dairy problems and rotation of farm crops, spraying mixtures and handy farm measures. When the average rural school shall have got the great vision and have redirected its work into these channels, the new educated leadership, spoken of above, will readily be realized.

(2) The rural schools as now commonly organized are wholly incapable of providing our farm population with the very vital subject matter indicated above. The units of organization are mostly too large or too small, thereby offering an inadequate basis for school administration. The latter is in the hands of untrained and generally incompetent school boards. Finally, the men and women that supervise and teach the schools lack, in large measure, the vision and preparation necessary to overcome this retarded state.

The units of organization commonly employed are, district, township and county.² Of these the district unit is the smallest and most democratic; but, unfortunately, it has passed its day of greatest usefulness. Organized as a necessity in colonial New England it was later carried by the pioneer settlers to the Middle West and West. This unit has proved too small to be entrusted with final legislation in matters of importance. Especially is this true where the taxing power is concerned. Local jealousy, parsimony and individual indifference have contributed much toward making the district unsatisfactory in actual practice. Under existing conditions it is quite possible for two or three individuals to dictate or manipulate the policy of the district. This is dangerous, to say the least, and explains in large measure why great sections of the country still cling to their thousands of poorly maintained, weak and wholly inadequate schools.

² See *The American Rural School*, Ch. II, The Macmillan Company.

There are several contributory causes for this gradual decadence of the district unit. The unrest in rural communities, with its exodus to town or to the western frontier, has done destructive work. To this should be added the pernicious custom of dividing and subdividing districts—still going on in the Middle West and West—already weak in the extreme, to the end of giving every ambitious farmer a schoolhouse near his own farmyard. Educational effort must from this time onward be exerted to combine these small units into areas large enough to maintain twentieth century schools. The day of the little red schoolhouse lies behind us.

The township (town) system of organization is rapidly displacing, or at least modifying, the small district in those sections of the country where the township is used for the administration of local government. In the South where the county is the basis of government, the same is used for educational purposes also. Where one board, elected from the area at large, controls all the schools, whether such unit be township or county, a more uniform standard of excellence and equality of school provision is sure to prevail. The county unit is believed by some to be too large for practical purposes. This may or may not be true. Certainly this policy is bringing excellent results in parts of the South where county organization has hastened consolidation of weak schools. Legislative and other aid should be invoked to hasten the day of transformation from the district unit to either the township or county or other large unit of organization. There cannot be a strong school nor much community spirit and enterprise before this occurs.

A great menace of the rural school is found in the general weakness and even incompetence of the school board. Very few country-bred persons have had adequate educational advantages to appreciate the needs of the schools. This becomes a further argument in favor of large units of organization; for, surely, the larger the area of the district the greater the chance of finding competent men. Under the circumstances many a board is composed of honest, well-meaning, but ignorant and, therefore, inefficient men, whose work is often further weakened by the addition of some aggressive, self-opinionated individual with an axe to grind.

If many of the best men in the community cannot be induced to serve on the school board, and this is a lamentable fact, the state should assist in every possible way those who are willing to

give their time to the community. Let them be trained for school service. We train teachers, why not also the men who hold the educational policy of the community in their hands? The monthly teachers' meetings and annual institute have played an important part in teacher-training. As much at least could be done for our school boards. They might by law be required to attend certain stated meetings to listen to specialists on school administration and through informal discussion at these meetings get expert knowledge for their important office. The state should provide mileage and liberal *per diem* pay for attendance upon all such meetings.

Next to be considered are the school overseers, commonly known as county or township superintendents or, in a few places, school commissioners. These officials, even more than the school boards, are in a position to mold the educational policy of the open country. But for many reasons they have not been equal to the task.

At this juncture let us recall that the early New England "school committees" had duties both of an administrative and supervisory nature. In time, as their tasks became multiplied and complex, the unsalaried committee found it necessary to delegate its supervisory powers to a paid superintendent, retaining only the administrative powers. Thus came into existence a school expert who, in our city schools is the center of the whole system—a man who outlines and carries into execution the educational and much of the business policy. Professional prestige and fair compensation have held strong educational talent in the city schools. But the rural schools have fared ill. They have been given over to a haphazard supervision that is usually underpaid and often both unskilled and inefficient. These pages do not permit of a rehearsal of the many more or less self-evident causes leading to present conditions. A word as to remedies must suffice.³ To begin with, the size of the supervision unit has caused much trouble. In New England it was at first limited to the small district, and this, of course, could not afford adequate paid supervision. Since 1888, however, legislative enactments have provided for the union of two or more districts into "union districts," under which several townships may be placed under one competent supervisor. This system has recently been extended to several states of the Middle West which are under township organization, and works well.

³ See *The American Rural School*, Ch. IV.

The chief difficulty is encountered, however, in the many states making use of the county superintendency. Here the unit of supervision is invariably so large that close and effective supervision is out of the question, if the work is left for one man to perform. Several remedies are at hand. One is to furnish the superintendent with competent office help, that he may spend practically all his time in the field; another, is to subdivide the county into two or more supervision districts, each under deputies responsible to the county superintendent. Such remedies are feasible and where tried have led to greatly improved supervision.

In addition to the above, the superintendency cannot be put on a true professional basis before the office is everywhere removed from party politics. So long as it is political many of the best teachers will not contest for the office. In states where the merit system prevails, and these are on the increase, the quality of supervision is rapidly improving. The superintendent's qualifications for office, too, should receive much more consideration than has been the case in the past. The man who supervises the schools should at least have as good an academic and professional preparation as the average teacher working under him. This is seldom the case.

The last member of the working staff to receive consideration in this discussion is the teacher. On him, after all, the greatest responsibility must rest. The new leadership needed in country districts cannot be forthcoming if the teacher is lacking in vision and power. The school now requires at least these things of the teacher: (1) He must be strong enough to establish himself as a leader in the community where he lives and labors; (2) he must have a good grasp on the organization and management of the new kind of farm school; and (3) he must show expert ability in dealing with the redirected school curriculum.

Here is the real problem of the rural school. We have very few teachers prepared for this work. The average teacher is city trained and knows little about the actual needs of country life. Indeed, it has been the belief for a long time that the rural teacher needs no special training at all. It is even argued "that a good teacher will teach any school well and there should be no differentiation." Such views are no longer tenable. A good academic preparation is necessary; but it does not immediately prepare the teacher to understand and meet the many baffling problems which belong to the revitalized rural community.

The teachers who have in hand the twelve million rural boys and girls are practically unprepared to meet the new difficulties. Here is a monumental task calling for solution. The agricultural colleges and normal schools have for some time been emphasizing agriculture and domestic science, and a limited number of teachers in these subjects have gone forth into the field. But, upon the whole, very few teachers of a "rural mind" have found their way to the country from these schools as yet. City and town high schools in half a dozen states have established normal departments or training classes to supply the demand for professionally prepared rural teachers. The only unfortunate thing about the whole matter is, that these training schools are at urban centers; and particularly, they find it hard to get the right point of view because they are more or less "city minded." Wisconsin attempts to overcome this difficulty in its county training schools, so-called. These strive to prepare youth from the farm to return to the farm as teachers. Present indications are, however, that the many state normal schools all over the country will organize departments for the training of teachers in rural life and problems, the new school organization, as well as in the redirected school curriculum. To the writer's knowledge at least a score of normal schools have or are organizing such departments.

(3) Hand in hand with teaching the subjects essential to farm life and a reorganized working staff to look after this teaching must develop an adequate modern school plant. Let us remember, the school is a farm school. It must be built for this purpose, in ample grounds—nature's own laboratory. It must be sanitary and well adapted to the new kind of teaching, be attractive and so large and centrally located as to become from the first the natural community center.

It is really needless to state here that in an architectural way the rural school has not kept abreast of the march in civilization. While well-equipped modern buildings are beginning to appear here and there, the schoolhouse is yet, with very few exceptions, the proverbial box car type so familiar to us all. No description is necessary here of its faulty lighting and ventilation, and utter lack of every sanitary appliance. Let it suffice to state that we cannot expect much in the way of community idealism to come from such ugly, uninviting structures, wind-swept and forlorn, set in some fence corner and exposed to summer sun and winter blast.

In communities where we must get along with the one-teacher schoolhouse for years to come, we should, by law, insist that where new houses are built or old ones reconstructed, such construction shall not begin until the plans and specifications have been accepted by a competent board appointed for that purpose. It should also be incumbent on the state superintendent of public instruction to publish a pamphlet on school architecture and place the same in the hands of all school officers, with all necessary recommendations and directions.

But the small school, make it as efficient as one will, cannot furnish the largest measure of educated leadership, such as is now sought. The slogan of our day is to re-establish the ancient principle of "equal rights to all," by offering in the country for country children as complete an education as is being offered in the city for city children. This contemplates the construction, here and there where needed, of schools having eight grades of work together with complete high school courses. The several small schools of a given community are to be consolidated into one strong central school plant, set in a large area of five to twenty acres, having its own garden, experiment plots, etc.

The new school will do for the community what the old was incapable of doing. It may be expected to train the boys to become scientific farmers and the girls practical farmers' helpmeets. It will inculcate a wholesome love for country life, and may be expected, accordingly, to counteract the townward exodus. But more: From the school will come the impulses to organize the rural population on a more permanent social and economic basis. It will become the center of all community interest. Here the extension lecture course may be held; here the neighborhood social entertainments and farmers' institutes and corn growing and cooking contests.

In a word, all that has been said above means that if the American rural school is to be the vital factor that it should be in the reconstruction of our rural life, the school must quit "marking time"; it must become more virile, more aggressive, and respond to the needs of present-day rural civilization.

SOCIAL SIGNIFICANCE OF THE AGRICULTURAL PRESS

BY J. CLYDE MARQUIS,
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The influence which the printed page has had upon agriculture cannot be definitely measured. The idea has been generally accepted that practical and, especially, successful farming has until recently been conducted apart from the directions given in books. The disfavor with which the countryman who considers himself especially practical has regarded those who consult the written experiences of others in books has been too generally dwelt upon in discussions of the literature of agriculture.

The influence of the printed page is particularly subtle. The casual reader often believes that he has received no benefit from an academic treatment of a topic, yet his subsequent methods are indisputable evidence that he has absorbed an idea and adopted the suggestions, even though he believes he has not. To say that the most important single influence for the improvement of agriculture has been the periodical press would be both trite and unnecessary, yet no discussion of the influence of the printed page upon agricultural methods would be complete did it not begin with this premise.

A sketch of the development of agricultural literature is necessary to secure an adequate appreciation of its importance. Its beginnings are unknown, and there were probably treatises on practical agriculture in early periods of Chinese history of which we now have no record. There are only occasional glimpses of the development of the art of husbandry in the early history of man. These appear in Biblical literature and in Egyptian records and later become more evident in the writings of the Greeks and Romans.

The first foundations of the literature of husbandry which may be said to support the present structure were laid by the Roman writers, and many of the fundamental propositions presented by them may still be accepted with trifling modifications. The husband-

men of to-day would be benefited greatly by a thoughtful perusal of the advice of Cato and Columella.

Following the Roman period there is a stretch of centuries until the time when the early English writers appear. Arthur Young has been mentioned as the forerunner of our modern agricultural writings, and he unquestionably set a standard which has been seldom equalled and rarely surpassed in descriptive and helpful writing on rural topics. The awakening which resulted from the entertaining works by Young was the beginning of the agricultural revival in England, and was also coincident with the beginning of modern agriculture in America. The friendly relations between Young and George Washington unquestionably had considerable to do with the popularity of the writings by the former in America.

Among American pioneers were a few capable, foresighted men who appreciated the importance of permanent records in agriculture, and their work is principally to be found in the proceedings of the various agricultural societies then in the forefront of the agricultural advance. Even before the opening of the nineteenth century there was a considerable volume of helpful agricultural literature not only in proceedings of societies but in a few periodicals and in a number of excellent books. Following the opening of the new century the increase in printed matter relating to the farm and the field was steady but slow. Periodicals appeared and after more or less successful careers were absorbed, transformed or abandoned until the end of the first quarter of the century found very little substantial advancement. Beginning about 1830 the quantity and the character of books and journals on agriculture received a considerable impetus. Capable men began to realize that an interchange of ideas was necessary. Books for farmers could no longer satisfy those who were interested in a given subject because of the distribution of the people over a wider area and the growing complexity of rural problems. The earlier journals were published and edited by men of ideals, backed by the courage of accomplishment, who looked upon their journals as agencies for progress rather than mere commercial enterprises. They stood for certain reforms and improvements, and though sometimes radical and extreme in their methods, their purpose was on the whole to improve agriculture, which they unquestionably did.

The three prime divisions of agricultural literature then, as

to-day, were: First, the periodical; second, the public and semi-public document, and third, the book, the three standing in this order as to numbers distributed. Periodicals reach a larger audience than either the proceedings of societies, some of which are private and others semi-public documents, or books which have a more limited circulation but perhaps a greater influence upon those who are actually reached.

As a conclusion of this hasty glance at the development of agricultural literature, we find at the beginning of a new century that periodical literature is most highly developed and specialized, and, in the opinion of many, commercialized to an extreme degree which must sooner or later result in the consolidation or transformation of many journals. With approximately five hundred periodicals devoted to one or many of the phases of agriculture and related topics, the field of periodical literature may be said to be crowded. These numerous periodicals send out literally millions of copies each week, and while a large proportion of the rank and file of rural people do not read a periodical regularly, all are touched directly or indirectly by the ideas thus distributed. Were they properly distributed, there would be several copies each month for each person engaged in agriculture in the entire country. This consistent dissemination of literature, going on as it does without ceasing and with growing force, constitutes the greatest agency for agricultural improvement.

Next in order of importance must be placed the public documents. They have increased in numbers within the last decade with great rapidity, and within the past five years the quantity of reliable free literature for the man on the farm has been almost doubled. There is little doubt that this increase will continue for some time to come. The recognition by the daily newspaper of the importance of agriculture, and consequently the regular appearance of departments concerning such matters is one of the newest and most significant phases of this rapid increase of printed matter on farm topics.

For the books on agriculture there is less to be said. The most valuable works now found in our libraries are the product of the last decade. The tendency for more popular and attractive literature has unquestionably brought down the average quality of the books produced. The new book that will remain authentic for a decade is the exception, yet there are many books now near the

end of their second decade of popularity that continue to meet with a large demand. The character of the new works on agriculture is on the whole entirely helpful, since a new type of literature which is both interesting and instructive is certain to be evolved through the experience of the publishers.

To pass to the social significance of this literature, its improvement in quality and its increase in distribution and in influence are due to the appearance of a generation that is prepared to be benefited by it. As soon as men are trained to put human experience in rural affairs into forceful, convincing writing, the reader will be able to secure more material aid from such writings. The facility with which reliable matter may be secured is the greatest point in favor of its development. We receive our new agricultural thoughts in our daily press along with the news of progress in other industries. The organization of press bureaus within the last few weeks by the agricultural colleges, state experiment stations, boards of agriculture and federal organizations is an important advance step in this direction. Few items of particular significance in agriculture now escape the daily press, and whereas such news was previously written in a form designed to be of general interest, it is now prepared by a special writer often trained in agriculture, so that it is both interesting and accurate.

Plans are in operation in several state experiment stations to send regularly to the local newspapers carefully prepared matter designed to meet local needs. This newspaper matter on agriculture is closely followed by the dissemination of clearly written and attractive circulars and bulletins dealing with special topics. These appear either as reading courses or as separate publications just as the subjects are timely. Bulletins of this character are now being issued regularly by a large number of the leading experiment stations and boards of agriculture, and are being distributed through the mails at farmers' meetings, banks, etc., until the numbers that are actually placed in the hands of working farmers aggregate millions of copies each year. The printed proceedings of state and local associations of stockmen, horticulturists, grain-growers, etc., are distributed to members and others at practically no cost to the recipient. A library comprising literally tons of material, most of it trustworthy, is being assembled by many farmers at absolutely no cost beyond the postage on their letters of request.

The consumption of agricultural books has increased markedly during recent years. The extension of lecture courses into outlying districts has gained the attention of several people who as a consequence become interested in following up these addresses by a careful study of the books written by the same man. Once the working farmer has a taste of the benefits which he can secure from a careful study of such literature he demands large quantities of printed matter.

Much of the agricultural literature of the past decade has been local and specific in that it has dealt with particular problems as they exist in a particular community, and has not been designed to broaden the farmer's social relations. It is noteworthy that a large percentage of the newer literature deals with his social relations; the periodical press as well as books and public documents now deal with social questions. The travelling library, which is growing rapidly in favor in rural communities in many states, now has its quota of good books and bulletins dealing with agriculture. The shelves of the reading-rooms of all kinds of gathering places for country people now bear their burden of the new literature. While much of it falls far below the standards established by the best writers, the influence which it has is on the whole beneficial. Agricultural literature is on the average of as high a quality as the technical literature of any industry, and if judged with consideration of its quantity it perhaps exceeds in interest and helpfulness the average of the printed page of other industries.

The present need is not so much more literature as a better interpretation of farm problems, both economic and social. There is a vast amount of repetition and generalization in present-day writings. New ideas and details are growing less frequent from day to day. In the mass of literature a signboard is needed to point the way for the uninitiated. This interpretation of the printed page is expected to be the next important advance in the field of the literature of the farm.

RURAL CONVENIENCES

BY H. E. VAN NORMAN,

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For many years a serious problem, receiving the consideration of the student of rural problems was the drift from country to city and the causes which underlay it. Gradually conditions are changing and there is a decided movement toward the country. Careful analysis of the situation suggests that a large factor in the changed condition and increased interest in country life is the development of rural conveniences which make country living more enjoyable, not to emphasize their importance as commercial factors. The perfection and wide introduction of the telephone, rural delivery and interurban electric railway are revolutionizing the sentiment in many communities and are making marked changes in every community where they have been introduced.

From a business standpoint it is almost impossible to estimate the financial results accruing by reason of telephone communications. To call a neighbor and ask for the exchange of labor on certain work, as threshing, haying, etc., is only the work of a moment. To have a definite answer immediately is often worth much. To be able to 'phone the village storekeeper, who runs a country delivery and ask that supplies be sent out is a great convenience to the housewife. To 'phone the implement dealer and learn whether he has needed repairs in stock and, if so, to have them sent out on the next trolley car, if not to ask him to telegraph the factory to forward them immediately by express, is a saving in time that often amounts to a large saving when the planting or harvesting of crops is delayed because of needed repairs.

Unwritten history is replete with instances of farm homes which have been saved from destruction by fire because of prompt help secured by word over the telephone; that valuable animals have been saved through the early arrival of the veterinarian who was summoned by 'phone is another illustration of the telephone's usefulness. Many an itinerant sharper's plans for making "easy money" in a community have been frustrated because his first caller, after learning that he was trying to drive a sharp bargain

'phoned the next neighbor who, thus put on guard, did not become a victim. The sharper in disgust turns to other fields where there are no telephones over which to notify his prospective victims of his game.

Business appointments, social appointments, discussions of social and church plans, to say nothing of the mere friendly exchange of greeting over the telephone have probably compensated every owner of a rural telephone many times over for the expense of it if all business advantages were ignored.

In spite of the fact that on some rural lines there are from three to twenty 'phones, many of which are called into play in response to a summons which only demands one answer, the subscriber would not be without its convenience because of its lack of privacy. At some seasons of the year the general summons to the 'phone gives notice that central is ready to report the weather bureau's prognostication for the following day. When haying and harvest or late seeding are in progress the notice of a probable change in the weather may mean the saving of part or all of a crop that would otherwise have been lost.

The rural delivery of mail has stimulated correspondence between friends and family. The certainty that the letter if written will reach the postoffice at the latest within twenty-four hours and that the answer will be delivered to the door even though every member of the family is too busy to go to the postoffice, makes for a sense of nearness which can hardly be realized unless one has experienced the sense of isolation when six or seven miles from the postoffice and "too busy to go for the mail." The business advantage resulting from a quick communication with the merchant and factory is again a factor the value of which statistics do not report. To know that the letter mailed to-day will reach its destination on the morrow in time for necessary repairs to be shipped on the night express is an economic advantage which is having a desirable influence. The increase in the circulation of city dailies, agricultural weeklies and innumerable monthly magazines, social, religious and literary, has been very great. In no place is the truth of the saying "that the more one has the more one wants" greater than in the increasing use of reading matter because of rural delivery.

The regularity of market reports with its resulting closer understanding of market conditions and better judgment as to when

to sell are only incidents of the conveniences that rural mail service affords. This usefulness will be added to immeasurably when the nation inaugurates a parcel post that will make possible the quick exchange of moderate sized packages between country and city at a moderate cost and with the promptness now possible in the exchange of written communications.

The interurban car line connecting the country and the town has both a commercial and a social influence in a community. To know that one has only to dress and "be ready for the 7.05 car" in order to attend a social function, a church gathering, an instructive lecture or an evening entertainment or other recreation and finish in time to catch the last car for home is conducive to rural contentment. To be free from the necessity of hitching up the horse by the light of a lantern before one dresses for the evening function; to know that one enters a social circle with the atmosphere of the house rather than of the stable; to know that after the evening pleasure is over horse and rig will not have to be cared for, and to know that a spirited horse is not standing out exposed to weather, even with a blanket on, while his owner listens to the lecture increases very materially the attractiveness of the evening diversion. This is especially true if in weighing the attractions and disadvantages early rising on the morrow is one of the drawbacks to the evening's social or educational event.

The money value of the trolley car passing the farm door on which supplies and repairs may be shipped in response to a telephone call is difficult to estimate; not only is the service of a messenger saved to the farm work, but with the aid of the telephone the needed article is often on the way to the farm before the messenger could have been ready to start for town.

Increasingly, the interurban car is becoming a systematic means of marketing products. Hundreds of thousands of gallons of milk, cream and packages of butter are regularly shipped from the farm gate to the city distributor or consumer. Market garden products, live and dressed poultry, eggs, dressed pork and mutton are all handled on many interurban lines. In some fruit sections four and five cars may be seen standing on the siding being loaded with fruit at a station where there is not a farm building in sight. Seven o'clock the following morning will find these products in the great markets of the city, fifty, sixty or even a hundred miles away.

When car load shipments justify it the private siding for loading of hay, grain and other bulky crops may be secured at the individual farm.

The delivery of morning and evening papers in a territory not supplied by rural mail is often accomplished by means of the inter-urban car.

The automobile, by some considered a luxury, is in many sections rapidly becoming an economic factor of no small importance. The actual time saved in the delivery of milk and cream to the creamery or shipping station or the delivery of other perishable farm products; the quick securing of repairs; the rapid movement of farm labor from one job to another; the reduced time necessary to be absent from the farm work in order to transact business in town and get back are matters of vital importance, independent of any sentiment. The pleasure and contentment of the family which the automobile makes possible because of the evening automobile ride for diversion or the exchange of social courtesies and the attendance upon meetings of various kinds is not to be overlooked. The great distance that may be covered, at the same time the fact that the evening pleasure with the automobile does not lessen the efficiency of the farm motive power on the following day, as is the case when the farm team must be hitched into the pleasure vehicle, is a factor which the student of farm conditions should not overlook. From a half to an hour's distance from railroad, church and social activities is the maximum desirable limit for a farm home. With the ordinary team and conveyances this restricts the distance to not over six or seven miles. With the automobile this may be increased to from nine to twelve miles and yet the farmer will feel nearer to town and his neighbors because of his automobile than he did with his horse-drawn vehicle.

The perfection and reliability of the automobile is rapidly introducing into the rural life problem a new factor in the personnel of the city business man who finds that the thirty to fifty minutes trip from home to office daily will, when taken in his automobile, permit him to live in the country where his children may have country air and freedom, and where he can forget city business problems in an effort to develop plant and animal life, whether it takes the form of generous lawns and gardens or a systematic farm business.

The influence of this transplanted city dweller on the social life, the labor problem and the farm practice of his new environment are subjects for study which the automobile and the interurban electric car have largely made possible. Probably no one factor has been a greater stimulus to the development of country roads with their economic importance in the movement of farm products aside from pleasure than has the rural and city-owned automobile.

Aside from questions of relative remuneration, social intercourse and educational opportunities, it is the conveniences made possible by the telephone, rural mail deliveries, interurban car line and automobile that are the greatest factors in the rapidly changing rural and urban sentiment toward farm life, and are hastening the day when the successful farmer will be recognized as of the true aristocracy of the nation.

THE RURAL HOME

BY SAMUEL G. DIXON, M.D., LL.D.,
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The Site

In selecting a site for a rural home, valleys and hollows should be avoided. It is desirable to locate the dwelling at least on the average elevation of the surrounding neighborhood. Be careful to keep away from the night condensation from the hillsides. The soil should be naturally well drained. Mosquito-breeding localities should be avoided in all climates. The dwelling should not be shaded by trees unless in tropical or sub-tropical regions, and even in such places only from the midday and early afternoon sun. In cold latitudes, forests to the north and northwest, far enough away not to throw shadows on the building earlier than two hours before sundown, are a protection against the severe winter winds.

Dust is detrimental to health; therefore, it is wise in selecting a residence in a rural district to keep well back from a public road. Before concluding upon a site, one should survey the neighborhood for public nuisances where offensive gases, smoke or dust may be carried by the winds to the home.

The house should preferably be long and narrow so that the broad sides may face the sun, and in this latitude receive the full sweep of the southern winds.

A square house is economical in shape and this should face or back to the southeast.

It is not desirable to have porches built long and narrow hugging the walls of the house, thereby cutting out the sun's rays from the first floor and cellar. A porch should be constructed either in the form of a square or parallelogram.

The long way of the parallelogram should be placed at right angles to the house. Either of these will give a porch throwing a minimum of shadow on the house and at the same time will, by its width, permit retirement from the hot sun in the summer and the

rains, whereas the occupants of a long, narrow porch are often driven into the house by the sun or a light fall of rain.

Second story porches for sleeping purposes are conducive to health. No room can be designed that permits of the same natural movement of fresh air as an open veranda.

Geological Formation

The topographical considerations being settled for the site, we consider next the geological formation of the surface and sub-soil. A glacial or broken rock formation, extending a foot or so below the foundations of the cellar walls gives a perfect drainage. A solid serpentine rock formation is very expensive to blast out, but makes a dry cellar. If you have to build in a clay formation, good glacial gravel or unglazed terra cotta pipes should be used for building drains, so that any water which settles down along the cellar walls can be readily carried off. Some of the shales make a fairly dry ground to build in. A broken hard sandstone is not an objectionable formation.

Transportation Facilities

Ready transportation to a business center is of great importance. Badly ventilated coaches on railroads, and the same objection obtains on many trolley lines, plus the deadly overcrowding, particularly when the industrious wage-earners are hurrying to their homes, are a constant menace to health.

Water Supply

This is one of the most important of all requisites, yet often overlooked until the grounds have been purchased; yes, often the house is built before the purity of the water supply has been determined.

Water found in limestone formations is often polluted. The fissures in limestone will carry water and sewage almost as well as iron pipes. So well is the fact appreciated by oldtime dwellers on such formations that they bore down until they find a limestone fissure and then drain their sewage into the same. In such formations you find some of the gushing springs spouting out great volumes of good looking but infected water. They have been prized for power and for domestic purposes, but the science of to-day often demonstrates their absolute unfitness for the latter.

Open streams vary much in the degree of their purity. This depends upon the character of the watersheds. The banks are often occupied by dwellings which drain their sewage directly or indirectly into them. They often run along or under railroads where they catch the sewage from the passing trains. They often run near and along public roads from the gutters of which they collect the sewage from the traveler.

Surface water, to be safe, should be filtered unless it is carried in pipes from a non-inhabited and untraveled watershed.

Surface springs depend upon the formation through which they travel as well as on the watershed which collects them. The water travels under the surface until the formation of the earth's surface permits it to again flow out at the spot called the spring.

Deep wells, tubed down into the sandstone, and carefully cased off generally produce a good water. The purity of water must be determined from a physical examination of the watershed as well as by the chemist and bacteriologist.

If a storage tank is used for a private water supply it should be made of unpainted wood, preferably gulf cypress or cedar. Black iron covered with asphaltum makes a safe storage tank. Lead or galvanized iron should not be used. The top should be covered with a fly screen to preclude the entrance of insects, rats or mice.

The intake should enter the top at the opposite end from the outlet. The latter should enter about three inches above the bottom so as not to disturb the sediment in the bottom of the reservoir.

Sewerage and Drainage

Equally important with the securing of a good, wholesome abundant water supply is the provision for its disposal after use. To flood a house with water without making ample arrangement for its ultimate disposition is to commit an absurd blunder which must lead to much subsequent annoyance and trouble. In fact, the sewerage should have the first consideration. The reverse plan is like "putting the cart before the horse."

The sewage, including the bath water and kitchen waste, must not be discharged into surface or underground streams. It can be passed into cement cesspools where the use of water is not too excessive; otherwise the cost of cleaning out would be prohibitory.

The cesspool can be often cleansed by pumping off the effluent, disinfecting it and using it for fertilizing where sufficient ground can be had. Gravel, broken stone, and disintegrated iron formations can be used for percolating cesspools when far removed from streams or shallow wells used for drinking purposes. Filter plants consisting of biological tanks, sprinkling beds and sand filtration and disinfecting tanks can be used so that the effluent can, with comparative safety, be permitted to pass into streams. The careless disposal of house sewage has cost the American people millions of lives, much suffering and great loss of productive mental and physical labor. The disposal of all sewage should be directed by a sanitary engineer.

Plumbing

The plumbing should be of the most sanitary kind. The soil pipes must be carried above the highest point of the roof. All fixtures should be trapped. The lavatories and bathtubs must be plugged at the bottom of the fixtures and not back in the waste pipe as that would leave a part of the dirty pipe to fill with water and then back up into the lavatory or bathtub water that would be drawn to wash in. A chain attached to the plug is a very insanitary arrangement and should be forbidden by law. An old-fashioned stand pipe or plug worked so that it is forced up or down from an arrangement outside the tub are both highly sanitary.

Ventilation

No room, including bath and toilet rooms, should be built without a window opening to the outside of the building. Every room should have at least two windows of good size extending from a foot below the ceiling to at least two feet above the floor, preferably in walls at right angles to each other.

Bedrooms should have transoms over the doors opening into the halls so as to permit of cross-ventilation. With the doors of the first floor rooms generally open and the transoms just referred to from the bedrooms opening into the second and third story halls, we secure an important ventilating factor if the well of the stairway is heated and carried to a vent at the roof.

Transoms over the doors on the first floor opening to the outside make excellent inlets for fresh air. They should be hinged at the bottom so that the incoming air first strikes the ceiling instead of being directed immediately to the floor.

Heating

Every dwelling should have a dry, well-lighted cellar with a headway giving sufficient fall to ensure a ready return of water to the boiler of a steam or hot-water heating system in case one or the other should be used. The heating system may be a hot-air furnace fired by coal, gas, sprayed oil or wood, depending upon the locality. The heating surfaces in any system should be supplied by fresh, outdoor air robbed of its natural wind movement as much as possible by a receiving chamber or chambers so that the air, when warmed, may be forced along by the falling of the cold outdoor air upon it and driving it up the hot air flues to the dwelling parts of the building. This is called indirect heating. Direct heating in living rooms, offices or public buildings is the cause of much ill-health and the loss of many useful lives. *Direct* heating is a system in which a steam or hot-water radiator is placed in a room or hall, thus simply heating the same air in the building over and over again after it has been chilled, principally by the cold glass in the windows. Such air is soon robbed of its oxygen by those occupying the room and becomes filled with organic matter from the exhalations from the human body. Living in such an atmosphere the blood soon becomes poor and the different organs of the body are starved and fail to do their work, and then the body falls a victim to all sorts of diseases. Three thousand cubic feet should be supplied for each person every hour. To maintain perfect health we must live in a moving body of fresh air both night and day, let it be warm or cold.

The hot-air flues should be built of terra cotta. It is economical to have a continuous tin flue inside the terra cotta so as to conserve all the heat. While the outside walls are colder, the heating register is always better placed on the outside walls or near them in one of the cross-section walls, as the movement is generally from the outside wall and, therefore, you get a more uniform distribution of warm air through the room. Forced ventilation is too expensive for the large majority of rural homes.

If a hot-air furnace is used, water should be kept in the hot-air chamber constantly, and the furnace kept in perfect order to prevent poisonous gases from leaking into the former to be thus distributed throughout the house.

When stoves, furnace or boiler fires are banked at night, the

fire door should not be used to check the draft. If, however, it is so used, a candle or lighted match should be held at the top of the door as it is being opened to gauge how wide to open it. It should never be opened wider than to the point where the flame is drawn into the fire-box, otherwise the gases will escape into the room. This same process should be adopted with the lid of the range fire in the kitchen. The air of houses is often charged with poisonous gases from the kitchen fire on account of the coal being built up above the top of range or the lid having been so far removed that the gases escape into the room instead of being drawn into the fire and passing up the smoke flue.

Open fires are good as auxiliaries with other methods of heating. They will overcome the dangers of the pernicious direct radiator system if sufficiently large to demand 500 cubic feet of fresh air per person every hour.

The Cellar

The cellar floor should be of cement or asphaltum. The construction should be such that rats cannot find their way into the walls. All vermin are dangerous to health. The inside walls would be better finished of some material that can be washed or easily cleansed.

The cellar should have an eight-foot ceiling, the first and second floors at least ten feet, the third from eight to nine feet.

Materials

The roof should be fire and waterproof. Hardburned brick, lined, giving an air space, makes a good wall. A cheaper structure would be of wooden or asbestos shingles. A soft stone makes a dryer house than the hard rock. All stone walls should be lined with hollow terra cotta. A dampproof course should be introduced in outside walls just below the first floor joist. All houses should be elevated sufficiently to permit of light, air and sunshine in the cellars.

Lighting

The lighting is important. Water gas is highly poisonous and, therefore, when used, the fixtures should be kept in perfect order with the stops so constructed that there is a good shoulder for the key to turn hard against, so that it cannot be turned too far around

and thus leave the gas partly on when the handler believes he has turned it completely off. Fixtures for any system of lighting should be placed beyond the reach of children.

Coal gas is much less dangerous, yet should be carefully guarded against. Acetylene gas is less dangerous. When mixed with too much of the atmosphere, it will explode. This should not occur owing to its early detection, as it is very pungent when breathed and, therefore, its presence easily detected. It should never be manufactured in the home.

Electric light is dangerous unless the wires are well insulated and passed through tubes along their entire course.

The best light for the eyes is from lamps placed in a bowl with a reflecting lining, hanging from the ceiling. This will throw a diffused light over the room when the reflected rays strike a light-colored ceiling.

Stables

All stables should be kept cleared of manure, this being placed in pits and screened so that flies cannot enter to lay their millions of eggs. To guard against insects and vermin carrying filth into your house and on to your food, the dwelling should be screened. The kitchen and dining-rooms should certainly be screened, if one cannot afford to protect the entire house.

It may be added as a corollary to the above advice that the rural dweller should be not less critical as to the sanitary conditions of his business home in which he spends nearly half his life, than he is as to those of his home in the country.

RURAL RECREATION, A SOCIALIZING FACTOR

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In April, 1906, a few men and women interested in play met in Washington, D. C., and organized the Playground Association of America. The little group was received at the White House by President Roosevelt, who later consented to become honorary president of the infant organization. Dr. Luther Halsey Gulick was made president.

Thus launched, the association grew with amazing rapidity and at the end of the first year, when a great playground congress was held in Chicago, it was realized that one of the most profoundly significant social and educational movements of modern times was taking shape, and had already become powerful and effective.

And this development has gone on with ever accelerating momentum until now every state in the Union is reached by its propaganda. A splendid literature on play has developed, and since unlooked-for ramifications and extensions of the play propaganda have appeared as the movement progressed, carefully selected committees have explored, charted, studied and described these, their reports having been published in the bulky proceedings of the playground association.

In the meantime the name of the association itself has been broadened to include all that the newer conception of the playground idea stands for, and has been changed to the "Playground and Recreation Association of America," its headquarters being in the Metropolitan Building in New York, where a strong official force is maintained, while field secretaries are busy the country over responding to calls for help.

Playgrounds and recreation centers, organized in the interests of adults as well as of children, are appearing everywhere, out of doors, in buildings, on roofs, in asylums, hospitals, factories, and even within prison yards. It has been discovered that play is not only a means of happiness, but is essential as a means of normal physical development, as a means of intellectual, moral and social

education. In many institutions it is found to have therapeutic uses for the healing of disease, as well as for breaking up the monotonous routine of institutional life. It is quite natural that most of this activity has been confined to our cities, first, because nearly all the promoters were city people, and, second, because it had not been realized, perhaps we may say suspected, that country people as well as city people needed supervised recreation and play. Yet we find in these days that the rural population also is coming to its own, and that a very vigorous extension of the play propaganda is reaching even into the country. What its purpose, methods and outcome are we must now proceed to describe, or rather hint at, for in the limited space allotted to this article nothing but a short resumé of the subject can be given.

The United States census designates as rural all who live outside of cities of 8,000 or more in population. In common use, however, it has a much narrower significance, and for the purposes of the present discussion we shall limit it to the little villages, cross-road communities, camps, and scattered populations, seaboard and inland, which have to do with the developing and marketing of the natural resources of the country. Suburban communities and large villages are not rural. It is a pity that the word rural is not better comprehended, for looseness in its use leads to looseness in thought and to error in inference and in conclusion. No one can grasp the real meaning of the word who has not lived in the country and absorbed the psychology of the truly rural mind. Socially and psychologically the native of the open country is different from the urbanite. One may live in the country for years and not get the rural feeling and the rural point of view. To own a farm or a house in the country does not necessarily make the owner rural. He may never fully grasp the significance of rural life. If he is city bred, he probably never will. He will be in the country but not of it.

Now the truly rural mind as developed on the farm is greater than the urban mind. It is almost purely democratic. In it, labor and capital are reconciled, and the farmer sees no reason why he and his hired help should not eat as well as work side by side in shirtsleeves. In it the psychology of manufacturing, buying, selling, storing and transporting, operate in harmony in one mind instead of at cross purposes in many minds as in the city. In it

the professional, the scientific, and the mercantile must strike a fairly even balance. The fully developed rural mind, the product of its environment, is more original, more versatile, more accurate, more philosophical, more practical, more persevering than the urban mind; it is a larger, freer mind and dominates tremendously.

It is because of this type of farm bred mind that our leaders have largely come from rural life. Ninety-four per cent of the leading citizens of one of our large Eastern cities, according to Dr. Hillis, of Brooklyn, were brought up on the farm. Of a group of one hundred representative men, commercial and professional, in Chicago, it was found that eighty-five per cent were farm or village bred. Eighty-five per cent of the students in four colleges and seminaries came from country districts, while upwards of sixty per cent of the men and women mentioned in *Who's Who* likewise are from the country. Dr. Hillis well says: "The brain and nerve centers are not more dependent upon the soundness of the related tissues than the city upon the rural districts."

And it is, of course, essential to national welfare that the rural districts should continue to furnish such leaders and therefore should be populous, prosperous, and contented. Yet everyone knows that they are neither the one nor the other. Isolation, hard work, long hours and small returns have increased discontent especially amongst the young, while the call of the city has been increasingly seductive. So it is not to be wondered at that a natural, legitimate migration from country to town has swelled to alarming proportions, scores of thousands fleeing like fugitives from the hardships and isolation of the farm lands, their departure making still more dreary and deadening to those who remain behind, the isolation from which they had escaped, and augmenting a discontent that in many sections has caused people to settle down into an almost helpless lethargy. The uppermost sentiment nearly everywhere seems to be: "Any thing but this! How can I get away?" National welfare requires that this point of view be changed to one in which, with cheery hopefulness, all ask: "How can we make conditions such that we shall be glad to stay?"

At this point it is important to bear in mind that the terms "rural" and "country" mean very different things in different sections. A statement that is entirely applicable to a farming section or to country villages in, say, the mountain regions of eastern Ten-

nessee, or perhaps nearer home, should not be considered as "personal" by residents of the many cultured, rural communities of which this nation is so justly proud. Stop a moment to consider the varied rural communities of this land of ours. Think of the mountain whites and the Georgia "crackers," think of the sparsely settled population of the Far West, of the rude mining settlements and lumber districts, perhaps fifty miles from any railroad, think of the black belt of the South, the half-civilized Indians, the undesirable immigrants, and others who are dispersed over our agricultural districts East, West, North and South, some perhaps nearer than we like, and remember that these are part and parcel of the rural problem.

In many rural communities conditions are thoroughly disheartening. Something must be done for them. With schools and churches, feeble, extinct, or unheard of, no worse places could be conceived of in which to bring up children. No wonder people want to leave. Yet for the sake of our national welfare they must be made wholesome.

Now, while a complete and frank description of such rural conditions as may be found in many parts of all of our states would make a dark picture, yet with it all one would have to tell of many communities of refinement and great prosperity, and of many measures of relief and promises of better days. A rural renaissance has already dawned. Better methods of agriculture and of business co-operation will relieve the industrial and economic elements of the situation, while an awakening church, an improved school, and a richer and more inspiring community life will tend to make social conditions centripetal instead of centrifugal and lessen the suffering from isolation.

It is in this latter respect that the recreation and playground idea will make itself felt, and it is hardly putting it too strongly to say that a well planned propaganda of recreation is as vital a necessity to the country's welfare as is improved farming.

Country people need more recreation and they need to be *trained* in the art of recreation and amusement. The older people everywhere give but little thought to the recreational side of life, while with certain elements of the population the quest for means of passing leisure hours often takes crude, uninteresting and even childish forms, not infrequently is rough and grotesque, and

altogether too commonly leads to immorality to a degree that is not generally suspected.

Into this matter of promoting wholesome recreation for the young and old the rural church, the reconstructed school, sometimes consolidated but more frequently under one teacher, the rural Y. M. C. A., the grange, and other fraternal orders, must enter heart and soul. As the writer has pointed out elsewhere, an adequate program of play would include pleasurable outdoor and indoor occupation, for (a) day schools, (b) homes, (c) Sunday schools, (d) other social organizations, public and private, suitable for Sundays as well as week-days, adjusted to the season of the year, and adapted to the needs of (1) very little children, (2) children from eight to thirteen, (3) boys and girls in the adolescent period, (4) adults; sex as well as age being taken into account when necessary. The word play thus broadened brings us into the realms of kindergartens, manual training departments, vacation schools, summer camps, boys' clubs, girls' clubs, nature-study clubs, camera clubs, collection clubs; it has to do with swimming, fishing, boating, skating, skeeing, and snow-shoeing; also with all forms of athletics; with the use of tools and implements, with the use of clay, plasticine, paper pulp, and putty for modeling; with the use of tops and marbles, bean-bags, balls and kites, stilts, toys, soap bubbles, cards, dissected maps, scrap books, and the myriad other amusement materials, plays and games which are the heritage of the human race, and without sharing in which no child can grow to complete manhood or womanhood, and no adult can live a cheerful, joyous, well-rounded-out life.

Let us itemize with brief comment or description some of the more important phases of a propaganda for socialized, supervised recreation, indoors and outdoors, in home, church, school, and community. Of course, we can do no more than hastily glance at the possibilities, with the hope of opening up the field in a suggestive way.

1. Amongst other indoor activities we should emphasize story telling. Mr. Richard T. Wyche, so well known as an apostle of this great and important art, says, "There are many homes that cannot afford libraries and the rich adornment of art, but no home is so humble that parents cannot gather the children around the fireside on a winter's evening or about the doorsteps in the twilight of a

summer's day and tell them stories." This is an art that parents and many other adults should cultivate. And note Mr. Wyche's suggestion about the fireside. The open fireplace can work social wonders if people will only give it a chance! Suggestive lists of books on story telling may be obtained of the Playground and Recreation Association of America.

2. From the story told at the fireside to the story told on a stage or platform before an audience is a natural evolution. Dramatic societies should be organized in every good sized community, and where the population is scattered several communities may unite to form one. We are only beginning to sense the educational value of dramatization. Yet once it was the best if not the only way to spread great truths amongst the people, as, for instance, the teaching of Biblical events and characters by the mystery and miracle plays of the middle ages. Note the results of an active village dramatic society in Oberammergau, Germany. Largely through its influence there has developed the most remarkable community in all this world, a little village in a remote mountain district, which generation after generation continues to produce gifted men, superb women and beautiful, wonderfully beautiful, and clever children, in extraordinary numbers. Oberammergau cannot be duplicated elsewhere perhaps, yet properly conducted dramatics will greatly enrich life in our country communities, as it has there.

3. Clubs for boys and girls are as necessary in the country as in the city. Besides clubs covering particular interests like photography, nature-study, Bible study, etc., organizations like the Boy Scouts, Campfire Girls, Knights of King Arthur and Pioneer Girls should be fostered and supervised by adults. Here is where the country pastor may exert a powerful influence, as well as the country teacher.

4. The grange and other fraternal orders, fire companies, literary and library associations furnish club life for men and women, and in these the recreation idea may well be emphasized. To such organizations the children must appeal for sympathy and help in their playground propaganda. A woman's club in a certain village gave a giant stride to the children. Its example is worthy of emulation.

5. Promoted by these organizations, communities should maintain lecture and entertainment courses, reading circles, a public

library, and, where possible, a choral union. Then there is the stereopticon with its wonderful possibilities. No community or group of communities should be without one, and systematic provision for its use should be made. The old fashioned husking bees and barn raisings are things of the past in all but a few communities, but why not bring back the spelling match and the singing school? Those of us who were brought up on such things know what an important part they played in our lives.

6. Church, school and other socials should pay more intelligent attention to their programs of recreation. Social evenings frequently are uninteresting, insipid and foolish because not carefully planned. They disgust and alienate instead of proving attractive and inspiring. On such occasions there may well be a serious core to the evening, a short literary and musical program, for instance, or a club meeting to discuss matters of community interest, to be preceded and followed by plenty of fun and amusement. Well thought out programs of entertainment, fun and recreation for all sorts of gatherings in the country are greatly needed.

7. Township or county gatherings, extending perhaps through two or three days, have been successfully maintained in several states. Most famous of these is the Hesperia movement, a winter gathering of Michigan farmers and teachers which has met for years in Hesperia, miles from any railway, to enjoy a program of lectures, music and discussion from Thursday night to Saturday night. Mr. D. E. McClure, to whom most of the credit for this movement must be given, said once, "Thousands of people have been inspired, made better, at the Hesperia meetings." Hesperia, with its powerful appeal to the craving for wholesome recreation, certainly has induced many to stay on their farms. It is a signal instance of the efficacy of a properly conducted "Stay on the Farm Movement," which is far more important than the "Back to the Farm Movement."

8. Itinerant social and literary meetings have also proved a success. Assembling by strawload or by walking parties on a given Saturday, bringing their lunch and meeting in a school house, church or village hall, people from several communities may gather with great profit and pleasure several times a year.

9. Systematic effort should be made to teach plays and games to children and to instruct them in the art of framing up programs

of indoor amusement. Such books as Bancroft's "Games for the Playground, Home, School and Gymnasium," the Dan Beard Handy Books, Nugent's "New Games and Amusements" and Johnson's "Education by Plays and Games" should be owned by every school and church, and constantly used. Country children do not play enough because they do not know enough about play. Their repertoire of games is exceeding limited, and their elders are even worse off than they are. Hence the importance of systematic effort to teach them what and how to play. The splendid work being done in this direction by some of the Y. M. C. A. county work secretaries, who actually have gone from one country school to another to ask permission to teach the children a few new games, is worthy of emulation.

10. Manual training, industrial and domestic arts, and nature-study furnish much indoor occupation which has high recreational value. The making of collections (stamps, autographs, eggs, etc.) should be encouraged, so should the making of useful articles for the home or school. Manual methods in Sunday school work are also decidedly in point here.

11. What has so far been said suggests the importance of having, in connection with church, school and home, a definite store-room or place for play and recreation materials, which should be treated with the same dignity as a library and should be as liberally maintained as possible. In it would be kept not only the toys and games, but materials for constructing various articles, drawing and painting materials, costumes that have been used in dramatics and that will surely come in handy again some day, pictures, projection apparatus, etc.

Outdoor recreation and play for country communities may include (1) activities suggested by the environment itself, such as hunting, fishing, camping, tramping, mountain climbing, water sports, winter sports, certain phases of nature-study and of farm work, like sugar making, husking bees, and so on; (2) group activities for boys like the Boy Scouts, and for girls like the Camp-fire Girls; (3) regular playground activities with organized and supervised plays, games and athletics; (4) community activities, such as pageants and festivals, county fairs and athletic field days and play picnics. Of these:

1. Hunting and fishing cannot figure conspicuously in the long

settled sections of the country for the obvious reason that fish and game are scarce. When these sports are no longer available, other forms of recreation must be provided to take their place, though not with the expectation that they will be as effective. The old-fashioned husking bee is no more, but the sugar bush is still with us, though in less romantic form because of its modern methods. It is now very business like and is no longer the "recreation center" it used to be in numberless places, with its rude shelter, its kettles, sap buckets and roaring campfires.

To supplement, or to take the place of these old time recreations, the more modern forms of camping out may well be encouraged in the country. Who has not known of boys putting up a tent near the house, or making a rough shelter in the woods and sleeping and eating in it for days at a time? Here is an instinct of which country pastors and teachers may well take advantage. A few tents in a community, owned by the church perhaps, or by the grange, or even by a ladies' club, may be made a means of grace to many if under the supervision of a wise leader.

2. Tramping is an almost unknown, or at least unpracticed, form of recreation in America, though it is popular in Europe. Pile some bedding into a wagon with provisions and extra clothing, and, with an objective point two or three days away, such as some historic site, some college of agriculture, some mountain, city or body of water, let the trampers set forth properly supervised and guided, camping along the road and thoroughly enjoying an outing whose retrospect is only less delightful than the actual experience, especially if cameras are taken along to make a visual record of current events.

3. Mountain climbing is another pastime which is just beginning to be appreciated in this country, but chiefly by city people. Tens of thousands of our rural population live near superb mountains, the conquest of which by climbing will prove most inspiring to mountaineering clubs whose membership should include women and girls. Recent magazine articles show the possibilities of this sport.

4. What has been called the "caravan" gives an interesting outing. It is a train of wagons, fitted up as comfortably and as attractively as may be desired, *a la* gypsy style, one serving as a parlor, another as a kitchen, others as sleeping rooms, and so on,

the caravan moving leisurely through the country in a most comfortable outing.

5. For the water there is the houseboat, with a great variety of possibilities, perhaps too expensive for a single family, but feasible for co-operative effort, especially if fitted up in the simple inexpensive way practiced by fishermen and river boatmen.

Tramping and camping expeditions may be accompanied by programs of plays and games, athletic events and water sports to any extent desired, with appropriate badges and mementos for excellence shown in competition or in attaining certain standards. Indeed, some outings are rendered onerous and dull for lack of the incidental play which should be counted on to liven up the day's doings and prevent monotony.

6. The Boy Scouts and Campfire Girls should be organized in country districts as well as in cities, possibly with slightly different standards and tests. "Rural Scouts" have already appeared in the West, and perhaps this name instead of "Boy Scouts" should be adopted for country boys. Country girls have not been organized along these lines, although an organization of "Pioneer Girls" has been projected. But in the Tomato Clubs of the South girls have achieved an organization which, at the same time that it is professedly vocational, lends itself to social recreation to any desired extent. The same is true of the Corn Clubs and other similar organizations of country boys. Yet these vocational clubs, strongly recreational as they may be, cannot play that rich part in the social development of adolescents as do the Boy Scouts and Campfire Girls.

So far we have touched on the more informal modes of recreation, the equipment for which is the world about us in which man and nature are playmates. We now come to that still greater and perhaps more important, certainly more social, field of recreation, in which man plays with man, combining for purposes of recreation in numberless forms of activity which, when properly organized and supervised, develop efficiency, build character, and often fuse discordant elements into a homogeneous, co-operating mass. In this more specialized field the recreational activities center at the playground, and here play comes to be recognized as one of the most serious and important concerns of life.

One of the best things ever said about play comes from Mr.

Joseph Lee, whom we delight to honor as the father of the modern playground movement in this country. "The thing that most needs to be understood about play," he says, "is that it is not a luxury, but a necessity; it is not something that a child *likes* to have; it is something that he *must* have if he is to grow up. It is more than an essential part of his education; it is an essential part of the law of his growth, of the process by which he becomes a man at all." All this is as true for the country child as for the city child.

But we must take a still wider view of outdoor play, and regard it as an essential for adults as well as for children. We should never get too old to play, and since it is so universally important we must undertake seriously to provide adequate play and recreation facilities for all. Having caught the wider significance of the playground idea, we shall come to recognize that the organized and supervised playground is as much a social institution as are the church and school.

And I would here emphasize, as I have in previous articles, that play in the country is not so much to promote health as to develop the higher social instincts, to introduce another powerful centripetal factor into country life which will tend to counteract the expulsive features which have been so actively depopulating our rural districts. A very important result of play in the country is the development of community spirit which is so seriously lacking in country districts. There seems to be so little to hold the people together. But once interest children in play, get them to organize teams, design and make a good school banner, compose and learn a school cheer, adopt a distinctive athletic costume or even a celluloid button which is to be worn when they go to the next great play festival and compete with other schools, and there will be no lack of community spirit so far as the children are concerned, and the adult population will soon be catching something of it too.

In country places playgrounds will have to come, if they come at all, through the generosity of some individual or clubs or on the initiative of some organization like a powerful school or college, a wide-awake church or a county work department of the Y. M. C. A. And they are actually coming in considerable numbers and in all parts of the country, and everywhere they produce the same social results. That is, they bring about fine community spirit, awaken civic consciousness and co-operation, and make for a whole-souled

companionship instead of for individualism and isolation. If we could see the playground idea prevail throughout the rural communities of the land, the gain to the nation through the ever increasing number of cheerful, contented, industrious, patriotic citizens will be far greater than if mines of fabulous wealth were uncovered or all the commerce of the world were brought under our flag.

Regular, supervised play should begin at the home, and how fortunate the children who have parents who are in sympathy with play and who will occasionally find time to play with their children! Sand pile, swings and other inexpensive apparatus are easily provided, and so are the chinning bar, jumping pit and running course.

The same is true at the school, even the one-room school. Helpful literature is now available for those who are willing to take up this work. The country road will have to be pressed into service for some of the activities, but every school should have ample grounds laid out and equipped for such games as volley ball, badminton, prisoner's base, captain ball, baseball or playground ball (the latter requiring much less space than the former), relay races, etc. Marbles and kite flying should be encouraged, and so should red rover, leapfrog, duck on the rock, moving statues, and a hundred other games that are readily learned.

Folk dancing should be revived in the country as it has been in the city. Here again manuals of instruction are ready.

Teachers, pastors and play leaders should make use of excursions, picnics and camping expeditions, as suggested above.

National holidays and other special occasions may be observed by the holding of pageants. There is already a generous literature on this subject which may be obtained through the Playground and Recreation Association of America. The pageant idea for country communities has been worked out by Mr. W. C. Langdon at Thetford, Vermont. His pamphlet, "The Pageant of Thetford," is a classic in the literature of recreation.

An essential phase of playground activity is athletics. These cannot be elaborate, of course, and if the teacher feels unequal to the task perhaps the country pastor or some other adult in the community would help.

A beginning in athletics is usually made by having the boys run, jump and chin themselves in accordance with certain directions and standards as explained in the following blank, a badge or button being given to each boy who attains the required standards:

ATHLETIC BADGE COMPETITION
COUNTRY SCHOOL ATHLETIC LEAGUE.....

| Pupil | Wgt | Age | Yr. | Mo. | Da. | School |
|-----------------------|-----|-----|-----|-------------------|---------------|---------|
| EVENTS | | | | Required Standard | Actual Record | Date |
| BOYS UNDER 13 | | | | | | |
| chinning | | | | 4 times | | |
| stand'g broad jump | | | | 5 ft. 9 in. | | |
| 60 yards dash | | | | 8 3-5 sec. | | |
| BOYS UNDER 15 | | | | | | |
| chinning | | | | 6 times | | |
| stan'g broad jump | | | | 6 ft. 6 in. | | |
| 100 yards dash | | | | 14 sec. | | |
| BOYS UNDER 21 | | | | | | |
| chinning | | | | 9 times | | |
| running high jump | | | | 4 ft. 4 in. | | |
| 220 yards dash | | | | 28 sec. | | |
| <hr/> | | | | | | |
| | | | | | | Teacher |
| <hr/> | | | | | | |
| For Central Committee | | | | | | |

| |
|---|
| <p>This competition is to take place at each school under the direction of the teacher and a representative of the central committee.</p> <p>Only those whose deportment and scholarship are satisfactory may compete.</p> <p>Boys may run hurdles.</p> <p>ONLY WINNERS OF AN ATHLETIC BADGE OR BUTTON ARE ELIGIBLE to enter the FIELD DAY CHAMPIONSHIP EVENTS.</p> <p>There shall be but TWO TRIALS in chinning, TWO in the dashes, and THREE in the jumps.</p> <p>CHINNING:—The boy must extend himself full length, arms straight, before and after each pull up; he must bring his chin fairly over the bar each time.</p> <p>The feet must not touch the floor or ground.</p> <p>JUMPING:—(See rules XXV. and XXVII. Official Handbook, P.S.A.L.)</p> <p>RUNNING:—(See rule VIII.)</p> |
|---|

The most important factor in promoting play in the country is the field day and play picnic, the great day of the year when the country schools of the district or county meet at some central point and pass the day in play. Since the first field day of this sort was started by the writer of this paper in a little village in New York State some seven years ago, the idea has spread very generally through the country, and it may be said that the field day and play picnic has become an important rural institution. Its main features are as follows:

A country school athletic league is organized among the schools of a county or commissioners' district to foster all kinds of clean athletics among country children, to teach them and their teachers outdoor and indoor games, and to bring the schools together at least once a year in a great field day and play picnic. For purposes of instruction, circular letters giving lists of books on games and athletics and other important particulars are sent to all teachers and pastors, while a number of games like prisoner's base, captain ball and some relay races are published with illustrative cuts in village papers and sent broadcast through the county. To further

aid the play propaganda volunteers are sent to the country schools to teach games and to help with the local athletic and badge contests. The matter is also presented at granges, institutes and public meetings by aid of the stereopticon.

Individual schools are encouraged to organize relay teams, and teams to play prisoner's base, baseball and other group games, and to compete with other schools. Individual schools are encouraged to have their own field days, while groups of three or four schools are urged to have an annual meet.

The grounds for the play festival, large enough to accommodate several thousand people, are portioned off into several play areas. In one place there are courts for prisoner's base, captain ball, bean-bag toss, basket-ball throw, and so on; another area is set aside for baseball or playground ball; still another is devoted to giant strides, playground slides, merry-go-rounds, and swings; nets are also stretched for volley ball, tennis and badminton, pits are dug for jumping, courses marked out for running and racing, a range laid out for archery, and many an interesting game or contrivance for testing skill or otherwise affording amusement is at hand here and there to attract little groups of children, who wander about all day long in perfect delight from one interesting occupation to another.

Provision is made for checking the packages and lunches of the thousands of guests, while water and toilet accommodations must be carefully and generously planned. Tents must be set up for those who are to sell frankfurters, sandwiches, ice cream and soft drinks.

An important feature of the occasion is the day nursery, consisting of one or more tents, furnished with cots, kindergarten tables and play materials, a sand pile just outside the door, and appropriate eatables which may well include sterilized milk in bottles for the infants. Here mothers may check their babies free of charge, leaving them in competent care while they themselves spend the hours in joyous freedom.

Carefully prepared programs are printed and freely distributed and trained play leaders are at hand to teach children and adults how to play and to supervise the activities of the day.

Balloon ascensions and other imported amusements and spectacles are strictly excluded, for this is a day of play of the people,

by the people and for the people. Thousands come to these occasions, and we want these thousands to play and not merely to be amused by hired performers.

Quoting from a recent article by the writer of this paper:

It is well worth while to stand at a place of vantage and watch these thousands assemble from every direction intent upon play, some by train, many on foot and horseback, and hundreds by wagon, caravans of which wind their way from neighboring villages and farms. Sometimes an entire district school comes to town on a hay-wagon, with flags and banners flying and with its school cheer frequently in evidence. Just think for a moment what this means to that school. It shows that co-operation, fellow-feeling, school spirit, community loyalty, and kindred virtues have been born into their lives, and that perhaps for the first time in their experience the social forces of country life have become centripetal and attractive instead of centrifugal and expulsive.

It should be emphasized that a play festival is not just for fun; it is not merely to while away leisure time; it is not a mere picnic. The latter has its value and is not to be decried, but it usually grows out of no special purpose other than to have a pleasing outing, and it exercises no permanent influence. The play festival, on the other hand, like the ancient festivals and feast days which are made familiar to us through the Bible, is of purposeful intent and has an important mission to perform. Of course, it consists largely of play, and one of its chief ends is the providing of amusement. But preparation for this day of pleasure represents months of effort on the part of hundreds and thousands of children and adults, and a great many by-products have resulted which are of priceless value.

Take the schools for instance—that is, those that are fortunate enough to be under the leadership of a good teacher. In getting ready to play their part in the events of the day the pupils become more closely organized, work of all kinds has been better done, school spirit has been developed and physical health has been promoted by participation in games and athletics. The school has become socialized.

Then, too, at the festival the children may measure their accomplishments with those of children from other schools and find out just what are their strong and weak points.

Then later the effect on individual lives. Acquaintances formed on these occasions may be followed up by profitable correspondence, by exchanging visits and thus lead to the establishment of lifelong friendships. The names of those who excel in one sport or another become household words throughout the country. How this stimulates self-respect and ambition! The real leaders in each community become known, be they boys or girls, men or women, and these may be brought together thereafter for organized efforts in worthy enterprises for the common good. And all the time the isolation of country life is being lessened.

Again, how easily may new and desirable features be introduced into a school or a community by these festivals, and what an opportunity they

afford for getting children to do the old things in the spirit of a new comprehension and from a broader point of view. For instance, if play festivals become a permanent institution in a country and it is known that there will always be competitive athletics and games, then running and jumping, prisoner's base, relay races, and so on, will become permanent features in the physical lives of the children who are within the radius of the festival's influence. If on such days there are events which may be participated in by only boys' clubs, then boys' clubs can thereafter be easily organized and maintained with incalculable benefit throughout the year. If there is to be a competitive exhibit of home-made bread and cake in one of the booths on the festival grounds, then will it be easy to get the girls to give careful attention to the art of baking. If corn-judging or vegetable contest is to be held, then corn patches and home gardens will multiply and flourish. If an exhibit of photographs, programmes, and printed matter showing the operation of men's clubs, women's clubs, Bible study circles, or literary societies should be made, with an intelligent person at hand to answer questions and give explanations, then will such organizations be likely to make their appearance in one community after another throughout the county. If there is to be an exhibit of school work in one of the tents, then all through the year the children will give more attention to the three R's, while sewing, gardening, bench-work, carving, basketry, and art will find a deservedly prominent place in an increasing number of schools and homes.

Perhaps it is not too much to say that through a series of properly conceived and well-conducted festivals the civic and institutional life of an entire country or district, and the lives of many individuals of all ages, may be permanently quickened and inspired, the play movement thus making surely for greater contentment, cleaner morals, and more intense patriotism and righteousness on the farm lands and in the village populations of our country. Such, indeed, are the socializing effects of organized and supervised play.

CIVIC ART AND COUNTRY LIFE

BY RICHARD B. WATROUS,

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The expression "civic art" may not be, and is not, a misnomer as applied to country life, for, as now most used in the cities, it relates to that art which is to be an intimate everyday art in contributing to the structural beauty and efficiency of community life. Community life is not alone that of the great city or the small town, but of any group, however small and widely separated. A home far removed from other homes may be a part of a community, even if that community is an entire county. It is an integral part of some larger group and it has a relation to that group as a whole.

If it is worth while that there should be concert of action in the cities for the attainment of the beautiful, it is just as important that there should be the same effort by individuals and small groups of individuals in the country. That there is need for such effort in the cities calls for no argument, and that that need has been appreciated is evidenced by the marvelous growth of the civic improvement idea as illustrated during the past ten years, in particular, in cities and towns in all parts of America. There have been compelling influences in the cities for civic art which have been too powerful to resist. Where the race for commercial and industrial supremacy has been so keen that there has developed but slowly a realization of the importance of those things too frequently called purely aesthetic, there has been forced upon men and women the actual necessity of attention to the creation and maintenance of parks, of playgrounds for children and recreation areas for adults, of clean streets, of proper housing, of dignified public and private structures and of all those contributing agencies to an atmosphere that makes for health, happiness, good citizenship and material prosperity. Those cities that have neglected to provide these factors of community life are waking up to a full realization that they are falling behind in the striving for material development. They have discovered that there can be no efficient utility without corre-

sponding beauty. They go hand in hand and are inseparable. It may be that a pestilence of typhoid fever is the awakening agency to the need for cleanliness in municipal sanitary conditions and an awakening to a consciousness that polluted streams, dirty alleys and an absence of breathing spaces are causes of disease and death. It may be that a diminution of existing population or a falling off of that new population attracted to a properly organized and conducted community is the impulse for better conditions. Whatever the impulse, the issue is sure to result in a transformation from conditions ugly to those of beauty and sweetness. The banks of a river cleared because the drinking water has been contaminated, give way to river fronts that are utilized for parks and boulevards on the one hand and imposing business structures on the other hand. Both are equally important to the city that would be great in all respects.

It should follow that if the "City Beautiful," made so by the care of its citizens, is worth while, the "Country Beautiful" is just as worth while. Mother nature did well her part originally; foolish man has undone nature's work in the city and the country. The field for man's constructive and reconstructive labor is almost, if not fully, as broad in the country as in the city. The incentive may be even greater. First, because at present the drift of population is from the country to the city and it is essential that there go to the city men and women equipped at the start to take the part in those activities of the city that shall contribute to civic beauty. They should be teachers and not students. Second, there is the growing march "Back to Eden," and it is essential for more reasons than this article permits of enumeration, why that Eden should increasingly draw a larger and constantly larger population from the city. The city-bred man or woman, in particular the one who has lived in a community where attention has been given to art, is going to find that country life the most attractive that has surrounded itself with the largest measure of those refinements that contribute to happiness and culture. And this leads to a statement that there are material reasons why the rural dweller should be a part of every movement that proposes to improve his particular section of the country. It has been proved conclusively that painstaking care and large expenditures for art's sake have more than paid for themselves in the city. It may be equally true for the country. The commercial motive, however, is not, and should not

be, the great motive. The benefits from a material standpoint are but the corollaries of the other really valuable benefits. That they do follow cannot be overlooked.

Bearing in mind that civic art as most commonly used relates to the everyday surroundings, or what the everyday surroundings should be, what are some of the things that can be done in the country, such as are done in the city and how can they be done? With the importance of civic art established as of equal importance in the country as in the city, a comparison of the methods of attainment is natural and proper. Before pointing out the way to civic art the question arises, "Just what is civic art?" One writer says, "Art is the well-doing of what needs doing." Such a definition, of course, involves beauty. But beauty is not easily defined. Raymond Unwin, an English landscape architect, says of beauty, "It is an elusive quality, not always easily attained by direct effort and yet it is a necessary element in all good work, the crowning and completing quality. It is not a quality that can be put on from outside, but springs from the spirit of the artist infused into the work. We are too much in the habit of regarding art as something added from without, some species of expensive trimming put on. Civic art, the expression of civic life, is too often understood to consist in filling our streets with marble fountains, dotting our squares with groups of statuary, twining our lampposts with wriggling acanthus leaves or dolphins' tails, and our buildings with meaningless bunches of fruit and flowers tied up with impossible stone ribbons." William Morris said: "Beauty, which is what is meant by art, using the word in its widest sense, is, I contend, no mere accident of human life which people can take or leave as they choose, but a positive necessity of life, if we are to live as nature intended us to—that is, unless we are content to be less than men."

With the distinction, then, that art is not alone that which is found in the gallery or the studio, but the very expression of life in all its finer qualities, how may it be best expressed in the country? Surely there has seemed to be an absence of civic art in the rural sections just as there has been in the city. The older sections of the United States, the New England States, for instance, afford examples of a lack of expression of civic art, just as do many of the newer sections. The first expression of the instinct for improvement, for it must be conceded to be an instinct, though too often slow of

expression, is in and about the home. The rural home offers unlimited opportunities for improvement. Too often the only evidences of an habitation are the tools and implements of the farmer, scattered about his premises with little regard to orderliness and no attention to adornment, unless it be a tree here and there for shade, and the desire for shade may be one of utility without especial regard for beauty. The same spirit that has prompted hundreds of thousands of city dwellers to "clean up" their back yards and replace bare surfaces of ashes and other debris with growing grass, shrubs and flowers, may well extend to the rural home. The transformation of the country home from just an eating and sleeping place to a living place, by the introduction of home gardening, for the sake of gardening and its beauty, and not for its sustenance alone, will do wonders to keep the youth of those homes willing to grow up and abide in such an atmosphere. It will also check the progress of the men and women of those homes to the asylums which statistics show are largely filled with those whom the very monotony of the daily life of the farm has driven there. Each farmer's home may be an improvement society of itself and its object may be "to make home surroundings beautiful." Once the desire for beauty is firmly rooted, the possibilities for acquiring it are simpler than in the city, for the nearby woods may afford much of the equipment. It is not so necessary as in the city to go to the nurseryman and the florist, for nature has provided her stores near at hand. But the actual effort towards beauty must be exerted.

It is just as true in the country as in the city that man cannot live unto himself alone. He is his brother's keeper even if that brother lives a mile away and not just over the fence or porch railing, and to that extent there must be the united endeavor to create not alone the beautiful individual home surroundings, but a territorial or sectional improvement that shall be uniform and expressive of the best in all the life of that territory or section. The evidences of improvement should be revealed in continuous stretches and not in patches. For instance, the row of trees, and trees are just as beautiful in the country as in the city, should not stop with the yard limits. They should line the thoroughfares that lead to and from the town or market centers. Of especial importance is the embellishment of roadways. Not only are good roads necessary these days to make the carrying of farm produce eco-

nomical. Rural roads are being traveled over now more than ever before for pleasure, and that traffic will continue with the increased use of automobiles and the increase of wealth. Beautiful avenues are just as much a source of delight to the senses in the country as in the city. Reverting again to the material aspect of civic improvement, there can be no doubt that a county distinguished for its good roads and its beautiful roads draws to itself a traffic that is a source of profit. A section that is delightful and comfortable to pass through is surely a section that attracts newcomers as possible permanent residents, and some day they may be so many in number that there will grow up new communities, brought to the very doors of the farmers, because the people of the county have been enterprising enough to enhance the value of their holdings by attention to the finer things of life.

The same spirit that prompts the making of beautiful highways, for the sake of traffic, will do more than plant trees. It will keep the highways clean and smooth; it will spend money to keep them free of dust by the use of oil and water or both; it will smooth off the plots between the roadway and the fences, clear away fallen trees and debris. It will prevent the desecration of hillsides and rock exposures by unsightly outdoor advertising. It will even go so far as to unite in saying that board fences shall not be used to tell how many miles it is to the next clothing house or motion picture show. It will, however, recognize the demand of the traveler for guidance and information by erecting artistic signposts and guides. Some day when it is fully awake to its responsibilities it will pronounce against the unsightly telephone and telegraph posts that too frequently are permitted to mar the aspect of otherwise beautiful roadways even to the extent of cutting off the tops and branches of noble trees to make way for the wires. The telephone is a blessing to the rural district, but it does not need to be a blight to trees and to roadway beauty. One way to solve the telephone post problem, where the expense of underground installation is prohibitive, is to place the posts back from the road on private property, even if the companies do have to pay a nominal fee for so doing.

Cities are giving much attention to the adornment of triangles and squares formed by the junction of cross streets. The same possibilities exist in the rural districts. How much improved the

view might be if at the conjunction of roads a triangle, here and there, might be made a spot to pause at, for rest, yes, refreshment of the inner man and beast. On main traveled roads such triangles might be made to serve a very useful purpose for the installation of drinking fountains, the surroundings cleared and parked and speaking plainly that somewhere and by some one or some organized group advantage had been taken of an opportunity for the expression of civic art. Even country roads with the glories of nature visible everywhere may grow monotonous and the touch of man's hand be appreciated. Such triangles, shaped into order and beauty and so maintained, would speak in no indistinct tones for an awakened and ever-awake public spirit.

To attempt to enumerate all of the avenues that are open for definite civic endeavor in the country would take a volume in itself. Reference should be made, however, to the opportunities for the expression of civic art in the architecture of the rural structures with particular reference to the schoolhouses. A large movement is under way for better country schools, that is, schools that may stand out in the open as illustrations of what public edifices should be. It is not enough that there be four walls and a roof to house the children, wherein they may learn the three "R's." Not all the learning from schools is in the books. Nor is it enough to give the children books with pictures of the stately and dignified buildings of this and other countries. Their own schools should be examples to them, for their constant enjoyment and edification, of the best in architecture. No matter how limited the resources for the erection of the building, it should stand, when completed, as more than an illustration of the carpenter's work. It is always worth while to seek the counsel of experts for the execution of a public or community undertaking. Especially is it essential in erecting the buildings in which and about which the youth of the nation spend so many hours. Not only should the school building be a model of architecture, but its surroundings should be made attractive. Much of this attractiveness may be made possible by enlisting the activity of the children themselves. There should be frequent arbor days for the planting of trees about the grounds. And every provision should be made for play—directed play. The playground, so called, is by no means a crying need of the city. The country boys and girls need their playgrounds and they need play-

ground directors. One of the things we are learning well these days is that play is a most important factor in the life of the child and that he needs to be told how to play, whether of the city or the country. Next to the home the school should be the attractive congregating place of the rural districts, not alone for the children, but for the adults. Just as in the city there is a great forward movement for the utilization of the facilities of school buildings as social centers, so should the schools of the country be used. They should be erected with reference to public uses by the grown-ups, provided the building is large enough, with a hall that may accommodate meetings of the people for miles around who, when the civic improvement idea becomes well rooted, will need opportunities for assembling frequently to consider the things they ought to do and how best to do them. It must be remembered that not all town halls are accessible to the rural dweller. Usually, however, the public school is accessible to particular community groups. Considering art in its more limited aspects, there is a large opportunity for useful service by school buildings for the installation and display of traveling art exhibits. Several states have made possible the circulation of such exhibits, and when a quickened public sentiment demands them other states will follow the example. The art exhibit is not at all, of necessity, a city privilege.

How may these benefits that result from concert of action be effected in the rural districts? In many ways; possibly not in so many ways as in the city, where, in addition to the scores of women's clubs and civic leagues, there are boards of trade and other organizations to father and carry forward public undertakings. In the country there is the necessity of falling back more on the individual effort than the collective. But the individual need not work out alone and unaided his methods of procedure. He can call to his aid the experience of the men and women of the cities, through affiliation with national and local organizations that exist for the purpose of inspiring and assisting such improvement effort. In addition to these organizations there are the magazines and newspapers that are nowadays so rich in contents relating to definite things that may be done for home, neighborhood and town adornment. And in addition to these agencies should be mentioned the great service that federal and state departments of agriculture are giving with particular reference to the actual and intimate life of

the country. The day has passed when the well-organized state departments of agriculture confine their beneficent service to telling how to get the best crops from the soil. They are giving, as they should, much attention to the problem of making the life of the country an attractive life. Several of the state agricultural colleges are holding midsummer conferences devoted to a discussion of civics as well as planting and reaping. The harvest from such conferences is almost as valuable as the harvests of the soil, for they are to yield an enlightened citizenship and a cultured citizenship which, when it blossoms to its fullest, will free not only the country, but the cities of many of the administrative diseases that now exist because of ignorance and blindness as to the really good and true things of life.

But there are, even in the distinctly rural districts, opportunities for collective endeavor, and they are being utilized to a gratifying degree. The Grange grows continually in its service to the people as an institution from which there may proceed united action. The church is realizing its opportunity and is opening its doors on week-days as well as Sundays for the holding of meetings to consider community improvement, of a kind that produces direct results. Few sections of this country are now so sparsely settled that it is not possible to organize and maintain, usefully, some kind of a civic improvement league or society. There should be a great era of organization of such societies, for through them can be effected the things necessary to be done to bring about a harmony of treatment of thoroughfares, a recognition of the value of good architectural effects in the country school, the wise provision of playground areas, of children's gardens, the best direction of tree planting and care and almost countless other things that are too often left unattended to because no one or no group of people make it a business to see that what is necessary to be done is done. Town boards, like city councils, if not prodded by their constituents, are too likely to do only the things that it has been the habit to do for years past. These are new days—"The old order has changed," as William Allen White says. It is necessary that there be organizations and organizations, and then organizations, to constantly suggest new things, and new expenditures, too, for these new things involve expenditure, but expenditure that is worth while. There may be commissions on country life—would that there were more

and that their service might be uninterrupted—but back of them and inviting their aid must be the rural demand, expressed through some kind of an organization or many organizations.

When, in the country and in the city, the people, all the people, awake to the realization of what Professor Lethaby says, that "Art is the well-doing of what needs doing," will we have a rural and an urban development that may truly be said to express real civic art. Then, and then only, will be made possible, easily, great state and national undertakings, such as transcontinental highways and vast park areas under national and state supervision. States will respond quickly to the call for state recreation areas; the federal government will open the way for a larger and more comprehensive development and administration of its national parks and scenic wonders. Selfish and unreasonable demands of commerce will give way, without resistance, to the demands of the people for the preservation of such glorious possessions as Niagara Falls and art will be the national and everyday expression that it naturally should be.

INFLUENCES EXERTED BY AGRICULTURAL FAIRS¹

BY JOHN HAMILTON,

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Introduction

Now that the better utilization of organized agencies for the improvement of agriculture is being generally considered, attention is naturally directed to the county fair association as a force which, if properly directed and developed, might be of great service, since it provides a local agency in each county that is directly interested in the development of the agriculture of that particular county and possesses the requisite legal power to act in directions that it may deem best for accomplishing its purposes. There are over 1,200 county fair associations in the United States, with a registered membership of approximately 250,000. Their annual gross receipts amount to about \$6,500,000, and their expenditures for premiums to almost \$2,500,000.

An investigation in 1910 by the farmers' institute specialist of the Office of Experiment Stations into the operations of the county fair associations of the United States shows that there were 1,203 of these associations in existence in 1909. Replies to inquiries were received from 465 of these organizations, or 38.65 per cent of the whole number, representing thirty-seven states.

The registered membership of the associations reporting was 95,321, and the total attendance in 1909 was 6,103,227. The total receipts were:

| | |
|----------------------------------|----------------|
| From gate receipts | \$1,331,594.09 |
| From concessions | 394,081.75 |
| From county appropriations | 23,270.38 |
| From state appropriations | 273,327.52 |
| From other sources | 503,476.31 |
| Total | \$2,525,750.05 |

¹ This article is a reprint of a portion of Circular No. 109, Office of Experiment Stations, United States Department of Agriculture.

These associations offered in premiums \$1,226,214.18, and paid in premiums in 1909, \$994,265.26. If the remaining 61.35 per cent of the whole number of associations not reporting average in attendance, receipts, premiums offered and paid equally with the 38.65 per cent reporting, the total for the entire 1,203 societies would be, in membership, 246,600; attendance, 15,791,000; gross income, \$6,534,900; amount paid in premiums, \$2,572,400.

Reports were also received from eighteen state associations, holding fairs in 1909, as follows:

| | |
|----------------------------|-------------|
| Total attendance | 1,490,029 |
| <hr/> | |
| Income from— | |
| Gate receipts | \$630,554 |
| Concessions | 193,200 |
| State appropriations | 361,214 |
| Other sources | 244,114 |
| <hr/> | |
| Total | \$1,429,082 |

The amount offered in premiums by these state fair associations in 1909 was \$367,809. The amount paid in premiums was \$270,187.

Present Need for Efficient Local Agricultural Associations

That need exists for proper local associations to aid in the improvement of rural conditions is admitted by all who have studied the country problem.

There is, first of all, the great fundamental need of increasing production. This of itself is sufficient reason for the existence of organizations in each county to give intelligent attention to soils, fertilizers, animals, crops, tillage, moisture supply, drainage, seed selection, fruit culture, the farm wood lot, and the many other items directly affecting agricultural production.

Then there is the need for the improvement of the highways, the consolidation of rural schools, the adaptation of the courses of study in these schools to country life, the betterment of agricultural homes and their surroundings, the economical marketing of products and purchasing of farm supplies, etc.

Agricultural educational institutions, particularly the agricultural colleges and experiment stations, are looking for more efficient means for reaching country people with agricultural information,

and now that extension departments are being organized in all of these colleges, the need for efficient local institutions in each county to act as centers from which to operate is very apparent. The county fair associations are already organized as public agencies for the dissemination of agricultural information, and it is only necessary to strengthen their organization and work in order to give them a larger and more important place in our rapidly developing system of agricultural education.

The county fair has already been found to be a most valuable assistant to the agricultural college and experiment station wherever its services have been utilized, and the college in turn has greatly strengthened the fair association through its support in furnishing educational exhibits and skilled demonstrators and judges at the annual shows, and by setting a high standard along all lines for rural betterment.

In response to inquiries sent out to the agricultural colleges and experiment stations of the United States it is found that out of forty-seven states and territories reporting, thirteen colleges and five stations sent separate exhibits to state or county fairs in 1908, and that eighteen other colleges and stations united their material into joint exhibits and sent them to state or county fairs. Many of these collections were very elaborate, including beef and dairy cattle, swine, sheep, poultry, fruits, vegetables, forestry products, nursery stock, models of farm buildings, samples of cakes, bread, canned and dried fruits, preserves, pickles, samples of needle work, exhibits of stenographic work, typewriting, samples of business letters, examination papers, charts; also specimens of feeds and forage crops, model dairy plans, plans for model farms, specimens of insects and fungus growths, tables giving the composition and yields of various crops, samples of soils, spraying apparatus; forge, lathe, and hand work in wood and metal, and similar articles exhibiting the character of the educational work of the institution. These exhibits were in charge of expert demonstrators to explain their characteristics and reply to inquiries respecting the work of the college or station. One institution had nine demonstrators at a single fair. In all cases the exhibits were of an educational character, and of use in teaching the subjects of agriculture, domestic science, or mechanic arts.

Farming people particularly were interested in these exhibits

and their appreciation and value have been such as to prompt the college authorities to continue and enlarge them. The colleges and stations were represented during that year at one hundred and one fairs, being limited in the number only by the amount of money available for bearing the expense.

Among the advantages claimed by the institutions from their exhibitions at these fairs are:

(1) Opportunity to meet farmers personally and explain the work of the institution.

(2) Opportunity to secure co-operators in demonstration work.

(3) Opportunity for the college to conduct agricultural schools and short courses and demonstrations while the exhibition is in progress.

(4) Opportunity to initiate new movements for the improvement of agriculture.

(5) Opportunity for the education of fair managers in the conduct of agricultural exhibitions.

(6) Opportunity for collecting into one place the results of field demonstrations for the inspection of the public.

(7) Providing a place for the exhibition of the results of contest work by school children and country youth.

(8) Enabling the college and station to secure the names and addresses of representative farmers and of young people with whom to correspond in disseminating agricultural information, and in securing co-operation in projects for rural improvement.

The Fair Redirected and Enlarged

All that the present fair association needs for immediate action in the wider field now open is a change of view as to its mission and scope and a practical plan for carrying on its work. Its activities need to be redirected and enlarged to fit the association to take advantage of the opportunities for aiding rural betterment that lie before it. If it is to be a leader in rural betterment its organization and methods must be carefully outlined in advance to be in accord with the conditions that control success in such enterprises. As careful a study should be made by the management, of the needs of farming people as well as of their peculiarities and temperament, as if those interested in the fair were about to invest in a department store or engage in the manufacture on a large scale of an article or articles intended for general use.

The fair even if assisted by the state will be largely dependent upon public patronage for its success. If public patronage is to be secured and held the fair as a whole must be made sufficiently interesting to attract those whose presence is desired. In doing this it can not descend to the use of low or questionable methods or to cheap, vulgar, or tawdry shows no matter how great the crowd these may draw or how remunerative they may be. Its attractions must be of a character that will elevate and instruct, or if for entertainment the exhibition must be free from everything that suggests evil, ridicules purity, or tends to deceive, defraud, or vulgarize the public.

The fair that is to be a worthy leader and is to meet the needs of country people must be strong, clean, full of interest, well managed, and in entire sympathy with country life. It must first of all and above all be loyal to its own constituency, the agricultural public, and not be swerved from serving them in the most effective way by any influence or set of influences that it may encounter, however enticing.

Exhibits

The fair in its main feature is an exhibition. Its character is therefore determined almost entirely by the grade and variety of the articles that it displays. Since its main purpose is to improve rural life in all of its phases, the exhibits should be of a kind that will contribute to that end. The basis, therefore, of the fair should be exhibits from the farm, the garden, the wood lot, horticultural exhibits, household exhibits, poultry, domestic animals, agricultural implements and machinery, models of country homes with sanitary surroundings and modern conveniences, forest products, manufactured articles, and educational exhibits of methods, courses of study, school buildings and grounds, and school gardens adapted to rural conditions.

The entries for premiums should be open to individuals, to institutions, and to communities. A brief statement made out upon a card should be attached to each exhibit showing by whom it is exhibited, the feature it is intended to display, with such additional information as may be important to a proper understanding and appreciation of its use and economic value.

Each class of exhibits should be set up by an expert and be attended by some one capable of explaining the quality and uses

of the several articles in his section. Whenever possible the exhibitor of the article or animal should be present in person during the fair and call attention to the valuable features of the things that he is exhibiting. If samples only are shown of larger quantities on hand for sale, they should be accompanied by a statement of the quantity that is thus available and the price, with a guarantee that the goods to be delivered shall be true to sample.

Judging

The judging for premiums ought to be by disinterested experts, and every award should be accompanied with a statement showing why it was given, and the judges should be ready to make a public defense, if called upon, in support of their conclusions. The state department of agriculture might have lists of persons on file certified as capable judges in the various groups of exhibits, who would be available for service at county fairs at a stated compensation.

Demonstrations

Certain stated periods each day should be devoted to demonstrations to be held at different places on the grounds. These demonstrations might be the packing of fruit; the use of the Babcock test; spraying operations, including the mixing of sprays, as well as their application; killing, dressing, and packing poultry for market; sanitary handling of milk; transplanting, budding, and pruning trees; seed selection; germination tests; laying out and planting garden plats; stock judging; canning, preserving, and drying fruits; cheese making; butter making; testing agricultural machinery; disinfecting rooms, stables, and clothing; conducting cooking schools, dressmaking and millinery schools; demonstration plat work; plowing matches, and similar contests.

These demonstrations can be made valuable features of the fair depending upon the skill of those in charge of them. Machinery in motion, processes in course of performance, and other forms of effort in actual operation attract attention and are never-failing sources of interest.

By stopping all other exercises and concentrating attention upon the demonstration features for an hour or two each day, variety will be given to the exhibition, and valuable information can be imparted free from interruption or distraction by other exercises.

Contests

Contests in crop production, animal breeding and feeding, and other agricultural operations should be organized early in the year, the results to be exhibited at the fair. Persons entering such contests should be required to declare in advance their intention to compete, in order to shut out crops or animals that are the result not of skill but of mere accident or chance.

In all such contests accurate data should accompany each report showing the items of cost in producing the article and the methods pursued. The premiums offered should be for results secured under conditions possible to every farmer of intelligence, and be for operations above those on a miniature scale. To exhibit ten ears of corn out of a crop of forty acres is no evidence of superior farming, but to exhibit ten superior acres out of such an area is a real test of skill and worthy of proper recognition. For persons in control of farms the contests should be in operations of sufficient size to require the exercise of more than ordinary exertion and skill. For boys and girls they could be adapted to suit the means at their command.

Entertainments and Amusements

Trials of speed, acrobatic and sleight-of-hand performances, exhibitions of trained animals, moving pictures, the merry-go-round, military drill, games of ball, foot races, and other athletic sports, balloon ascensions, and similar entertainments are all unobjectionable when properly controlled, and provide entertainment to those who come to spend an idle hour. They should, however, not be permitted to interfere with the main exhibition and the more serious purposes of the fair. The association must first of all be loyal to the industry that it represents. To insure this its entertainments should be restricted to certain hours, and when presented opportunity should be given to all to witness and to enjoy them.

All disreputable shows, gambling devices, and loud coarse fakirs with monstrosities to exhibit, should be rigidly excluded from the grounds. Nothing that the most refined and modest woman might not see or hear should be admitted. All others ought to be shut out as unworthy of a place in a self-respecting community, and the superintendent of this department should be held to

strict accountability for the enforcement of this rule, and an adequate police force should be at his disposal for the purpose.

The expenses attendant upon the presentation of the open air entertainment features of the fair could be met by the fair association, and for this a specific appropriation might be made. Such in-door sports or entertainments as the merry-go-round, moving pictures, animal exhibits, and sleight-of-hand performances, can be permitted to charge an entrance fee, the amount to be agreed upon with the managers of the fair.

State and County Aid

An assured income is a necessity if the fair is to do its work efficiently and expand as the needs of the country develop. State or county aid, or both, is essential in any system of fair organization that is to serve the people and improve their methods. The lack of such an income is responsible for the presence of most of the objectionable features admitted to fairs at present, and for the consequent loss by the fair both of prestige and support by farming people. The management must be independent of need of the money that fakirs and gamblers offer for the privilege of swindling visitors.

Grants of money to the fair association by the county or the state are therefore a necessity without which the best and most useful type of the fair can not exist. These grants should be carefully guarded so as to stimulate and not enfeeble effort on the part of local people, and to insure that the funds are not used in promoting worthless projects or visionary schemes. The representatives of the state boards of agriculture appointed to see to the proper conduct of the county fair should also be charged with making inquiry into its use of the public funds, and if these are squandered or used in violation of law, subsequent appropriations should be withheld until the portions so misused shall have been refunded to the state or county and satisfactory assurance given that future grants will be properly expended.

Premiums

The character of the premiums awarded may vary indefinitely, and be in the form of cash, medals, certificates, or other recognition of merit according to the importance of the display and its

place in rural industry. The award should be for excellence, and no matter how many articles are exhibited in a class or how few, no premium should be given unless deserved.

The competition is not so much with others as with excellence. The exhibits, therefore, should be rated and the award made as this is approached. Accordingly, for the information of competitors, there should be published with each class of exhibits the requirements that will be considered by the judges, and as far as possible the percentage for each requirement as it enters into the make-up of a standard article or animal in that class.

Special premiums should be offered for new methods, or for new plants, animals, or implements introduced and of superior excellence. Similar special premiums should be offered for successful farms, for special crops, or for herds of animals reared by the owner on any farm, and for superior orchards and gardens; for school buildings, including also churchyards, country cemeteries, and other items that can not be shown at the fair, but are worthy of special recognition as evidences of intelligent treatment or marked success.

Water Supply

An abundant supply of wholesome water is most important, and the fair grounds should not be located where this can not be had. Where connection with a town water system is not possible a reservoir supplied either from springs or from a well is a necessity. The pumping engine should be of sufficient capacity to throw a large quantity of water in case of fire or other emergency.

Season for Holding Fairs

Successful fairs are being held at all seasons of the year—midwinter, spring, midsummer, and autumn—depending upon the object to be attained and the accommodations. The midwinter fair must, of necessity, be indoors. For this, closed and heated accommodations must be provided sufficient for the exhibits and for the visitors who attend. The exhibits at the winter fair are usually confined to live stock, seeds, grains, poultry, florist's plants, and exhibits along the lines of domestic science and household art. Those in the spring show implements, machinery, nursery stock, vegetable seeds, hotbed plants, fertilizers, dairy and creamery products, household furniture, and samples of grain, such as wheat, rye,

barley, oats, corn, clover, and timothy seeds for spring planting, exhibited as specimens of larger quantities held in store for sale.

The summer fairs exhibit the products of agriculture of the season, as summer fruits, garden vegetables, grain and forage crops, live stock and poultry, household articles, manufactures, agricultural implements and machinery, samples of grains for autumn seeding, berries, school gardens, forest plantations, model samples of school grounds, experiment plats, seed testing on trial plats, stock judging, testing dairy cows, and similar exhibits. The summer fair partakes largely of the nature of a harvest-home picnic or summer outing, and includes lectures and addresses by eminent agriculturists and others interested in rural betterment.

The autumn fairs are held in most of the states in the months of September and October, and comprise a collection of the products of the year. They are the principal fairs of the season.

Paid Secretary

If the fair association is to fulfill its mission, its influence will have to be felt for more than the few days during which the exhibition is held. It will have to be an active force the year round. Before this can be done there must be a paid secretary who can devote all of his time to the affairs of the association. The secretary should be an expert in agricultural matters and not a mere clerk with little or no practical or theoretical knowledge of this industry.

How Shall County Fair Associations Be Induced to Undertake This Work

Many associations are now ready for what has been here outlined, and will be glad to undertake the work if a practicable plan is shown. Others will need urging. This will require the personal efforts of organizers to meet their managers and show them precisely how they can do at least some of the things that are needed, leaving the others, if necessary, for future consideration after the movement is well under way.

Responsibility for and the initiative in this work might be given to the state boards and departments of agriculture. Agents could be employed by them to visit the several counties to organize new fair associations, and to reorganize the old. Later, these

agents should revisit the societies to see that they understand what is proposed and to assist them when necessary in carrying out the project. This is a kind of service that the State departments of agriculture are specially fitted to undertake, and, in securing valuable results to agriculture, is as promising a field of effort as any other that they have hitherto attempted.

Most of the state departments or boards of agriculture have interested themselves in the local fair associations very little beyond collecting copies of their premium lists and getting records of attendance and the amount of the gate receipts. If they will devote some of their time and money to sending out an expert or several experts to organize county fairs and to advise with their officers and aid them in carrying on their work, they will not only be increasing their usefulness to the farming industry, but their action will also be in direct keeping with the purpose of the Commonwealth in establishing state departments for the benefit of agriculture.

THE CHAUTAUQUA MOVEMENT

BY PAUL M. PEARSON,
Professor of Public Speaking, Swarthmore College.

The special summer assembly organized by Bishop John H. Vincent, to which he gave the name "Chautauqua," has not only grown to nearly a thousand summer gatherings bearing that name, but the features of these meetings have become varied and inclusive. Bible study and recreation, which characterized the early years at Chautauqua, New York, are the features dominating a dozen or so of the present-day assemblies, Chautauqua Institution (the official name of the present Chautauqua), Winona Lake, Indiana; Mt. Gretna, Pennsylvania; Old Salem and Quiver Lake, Illinois; Ottawa and Winfield, Kansas, and some others. At a larger number, recreation is featured, Bible study is given more or less emphasis, while music, literature, travel, economics and various other subjects are presented in classes, or the emphasis is given to popular lectures and concerts. These are resort Chautauquas, where people spend a few days or weeks in study and recreation. Chautauqua Institution easily leads all others. There the summer population reaches more than twenty thousand; the session lasts from late June until early September; and the program of lectures, concerts, recreation and study includes everything that earnest people may want. Other summer assemblies, like Winona Lake, Indiana; Bay View, Michigan; Monteagle, Tennessee, have an attendance of many thousands and are doing a great and important work in popular adult education.

The resort Chautauquas are perhaps only one in twenty of the total number of assemblies that have appropriated the name. While the attendance at resort Chautauquas is largely from smaller towns, yet these do not influence rural communities as do the local Chautauquas. For the most part local Chautauquas are held for a short period, seldom less than six days, and never more than three weeks, the average being probably ten days. They are held in towns of from 500 to 20,000 inhabitants, but in few cases would the Chautauquas be possible without the support of the farmers, who are counted

on to drive in in such numbers as to make the Chautauqua a financial success.

A large tent generally serves as an audience room, though in an increasing number may be found a steel structure with open sides called a Chautauqua auditorium. Few of the local Chautauquas have campers, the audience being recruited from the farmers who drive in, the housewives who cut short their daily routine, and the business men who leave, and in many towns close their places of business for some hours each day to attend the sessions. In only a small percentage of these assemblies is there any attempt at class instruction. Where such is given, it generally includes domestic science, arts and crafts, needle work, Bible study, or the Round Table, identified with the work of the Chautauqua Literary and Scientific Circle.

The platform program of lectures, music and entertainment is the one feature of the Chautauqua idea which has been included in several hundred summer assemblies that are called Chautauquas. Some amusement parks have adopted the name, some committees use the name for a variety program which is more like cheap vaudeville, but even in these ignorant and misdirected efforts, Chautauqua stands for an attempt for community betterment. The results in most cases are immediate and far reaching. To understand this, we have only to note the conditions. People generally sit in audiences where their coming together gives them a label. They are Methodist or Baptist or Democrats or Republicans and they listen only to speakers who believe as they do. At the Chautauqua, however, they sit together as a community and listen to Methodists, Baptists, Catholics, Democrats, Republicans—men of any creed or party, who come because of their message, who come not because of their identification with a sect or party, but because they have something which the community as a whole wishes to hear. On the same program may be heard an admonition that the country should prepare for war, and an equally emphatic denunciation of the waste in preparing for war. One speaker may advocate a plan for economic betterment which a few days later another speaker will stoutly oppose. Sectarian and partisan presentations are not permitted, but religious, political and sociological discussion is welcomed. The effect on the community is that the listeners challenge what every speaker says and challenge their own ready-made or

inherited beliefs. Progressive ideas in religion, education, politics and business inevitably follow.

By its organization the Chautauqua is calculated to make the deepest impression on the community. It is widely and persistently advertised: a large number of season tickets are sold in advance; the price of admission to the holder of a season ticket is seldom more, generally less, than ten cents for each event on the program. There is a musical prelude before every lecture, so that the audience is made more impressionable. Sessions are held afternoon and evening, by which continual coming and going the crowd spirit is aroused, and those who early in the week were indifferent yield to the desire to do what their neighbors are doing. In these and other ways is the audience rendered suggestible. The lecturers who address these audiences speak with authority, either such authority as continued advertising may give them, or the authority which attaches to being much in the public prints. Given a suggestible audience and a lecturer who speaks with authority, the result upon the community is immediate, notable and more or less lasting.

How much the rural communities support the Chautauquas may be understood from a few figures. In Nebraska, with sixty-one towns having a population of a thousand or more, there are fifty-five Chautauquas. Iowa, an agricultural state, has nearly two hundred Chautauquas. Thus far in their development the local Chautauquas have been established almost entirely in agricultural communities. Illinois has nearly two hundred, Kansas has about fifty, Missouri as many more, Oklahoma a dozen, and the rural communities of Indiana and Ohio are organizing a number each year. During the coming summer nearly a hundred Chautauquas will be held in towns with an average population of five hundred.

When the camp-meeting began to lose its hold with the people, Bishop Vincent greatly extended the scope of instruction offered, added entertainment and recreation to the plan and inaugurated the Chautauqua idea. Like the idea which it supplanted, the Chautauqua is supported largely by the rural community.

The immediate effect of the Chautauqua upon rural life must be positive. Not only in the local Chautauqua, a movement in the smaller towns where the farmers' families are depended on for support, but at many of the Chautauquas, farmers pay the largest percentage of the gate receipts. At one Illinois town with a population

of 463 where the price of a season ticket was a dollar, the receipts were nearly \$800.00. In another with a population of 370 the receipts were \$632.00. At Rockport, Missouri, and Clarinda, Iowa, for example, it is not uncommon to see from 500 to 1,000 buggies, carriages and automobiles at the Chautauqua grounds. Lincoln Park Chautauqua is several miles from the little town of Cawker City, Kansas, with no means of transportation except private conveyances. The constituency is almost entirely from the farms within twenty miles. Yet few audiences there number less than a thousand people, and at times there have been as many as ten thousand people on the grounds. Camargo, Illinois, with similar conditions, has had even larger crowds on the grounds. Possibly the most notable Chautauqua of this type is Old Salem, on the farm where was located the grocery store in which Lincoln clerked. The president of the board of directors and the most active man in the management is a farmer. The grounds and improvements on the banks of the Sangamon River represent an investment of fifty thousand dollars. Here are a few cottages, but most of the people tent during the three weeks' session. They drive in from their farms with wagon loads of camp furniture and provisions, send the teams home by the farm hands, and stay to enjoy the varied program. The tenting population has not for years been below a thousand, while it oftener reaches twenty-five hundred people. Besides those who tent, hundreds drive in every day, and on special days the crowd is increased to ten or fifteen thousand people.

Farmers are the largest and most attentive portion of the audience when men of the type of William Jennings Bryan, Robert M. La Follette and Richmond Pearson Hobson speak. But the special features on the Chautauqua program which deal definitely with farm life are increasing in number and popularity. Farmers eagerly listen to Professor Holden talk on corn and soil, or D. Ward King explain the split-log drag method of road making.

Whether from the country or from the town, the audience soon becomes impatient with anything technical or academic, or with an inexperienced speaker, and quickly avails itself of the open-sided tents or auditoriums to make their escape. But, with a skilled speaker, they will sit for an hour or two, apparently unmindful of the intense heat or the uncomfortable benches.

At scores of Chautauquas in Iowa, Missouri, Illinois and Kan-

sas there has been introduced in recent years special instruction in stock judging, soil and seed testing. This is generally given at a morning hour, for smaller groups, when object lessons are offered by professors from the state agricultural colleges. In a few places, notably Clarinda, Iowa, boys' corn clubs have been formed, and similar clubs for girls. These young people have separate camps on the grounds, where they have their own co-operative organizations for helping with the cooking, waiting on tables and where they carry out a specially arranged program of sports, and work in stock judging, seed testing, or household economics. At Clarinda, last summer, more than two hundred boys and girls from the country were enrolled in these clubs.

The popularity of the county fair less than a generation ago is now enjoyed by the local Chautauqua in these middle western states. One has but to attend a fair and a Chautauqua to be impressed with the difference of outlook offered by each. To illustrate: A certain Iowa town is said to conduct the best fair in the state, with the exception of that held at the state capital. Twenty-five cents admitted the visitor to the grounds, where he might see a half dozen exhibits of improved farm machinery, demonstrated by the manufacturers, and less than a hundred entries for prizes in needle work, baking and preserving. Farther on were a score of tents with freaks and fakes, to each of which an admission fee of only five or ten cents was charged, so the score of noisy barkers shrieked. There were a dozen soft drink, confection and lunch concessions, each with a leathern-lunged barker. For an additional fee of twenty-five cents, the visitor was admitted to the grandstand to see the races. Here a dozen venders made their way among the seats, lustily shouting their wares. At every step the visitor was importuned to spend money. On the street at night, was a free open-air, hair-raising exhibition, and innumerable noisy venders. So far as the visitor could see, the fair had brought to town race-track followers, freak exhibitors, and many persons with ingenious schemes of varying degrees of honesty or dishonesty for separating people from their money.

Three weeks, later, on the same grounds, was held a Chautauqua which offered an eight days' program, including more than thirty events, for two dollars and a half. On the program was excellent vocal and orchestral music, two of the leading political

speakers of the country, a famous preacher, a half dozen clean entertainments, and much more that a discerning committee of men who were interested in the uplift of the community could provide. The attitude of the management was to give all it could to the community. There were no extra fees, no attempt to get money from the visitor after he entered the grounds, there was no noise, no questionable characters in evidence. The Chautauqua was simply the organized best element of the community expressing itself.

THE TRAMP PROBLEM

BY O. F. LEWIS,

General Secretary, Prison Association of New York.

What we in the United States need to do first with the tramp problem is to wake up. We have dealt with it too long as we do with a disagreeable visit to the dentist, that ought to be paid but is not.

We have a rural tramp problem and a city vagrancy problem. Let us first take up the general question. Tramps don't tramp very much; they ride. The railroads are the best and the worst friends of the tramps; best, because, as Josiah Flynt has said, they enable the man who begs from you on the streets of New York on Monday to accost you on the streets of Chicago on Saturday; worst, because the railroads are the severest prosecutors of the tramps.

The tramp problem is both easy and hard to understand. Easy, because it is easy to understand what makes tramps; hard, because it is hard to know how to deal with the products of the causes, or with the causes themselves. Because it is easy to get rid of an individual tramp, and so hard to handle rationally a group of tramps, the almost overpowering tendencies of individuals and communities are to do as the man did with the dead cat:—throw it into his neighbor's yard, from which it, in turn, progressed through other yards until it arrived again in the yard of the original neighbor.

There is much unclear thinking about tramps. The bulk of people probably do not know what they mean when they talk about tramps. Some of them have learned about tramps from funny papers; some from the stranger in the street; some from having their summer cottages robbed or burned; some from being on boards of managers of hospitals that give costly free treatment to worthless outcasts. Charitable societies, missions, city lodging houses, courts and prisons have all dealt with, and do deal with, the "hobo." When the solution of a problem is hard and costly and perhaps useless in the end, it is apt to be side-tracked. Thus it is with the related problems of inebriety and vagrancy.

Yet in the United States census of 1904 it was shown that drunkenness ranked first among the causes of commitment to penal institutions in the United States, and that vagrancy ranked second. Between them they caused 43 per cent of the commitments in the year 1904. That is a costly price to pay for neglect to solve, if possible, the problems of drink and voluntary idleness.

I do not wish to lead the readers of this journal again through the array of well-known or widely announced facts and opinions regarding the extent, the costliness and the futility of vagrancy and the tramp-evil. Since we are a nation of newspaper readers, it must be familiar news to us that the railroads report that in the aggregate they lose at least \$25,000,000 a year through railroad vagrancy; that there are perhaps a half million tramps in the United States; that their paths lead like cow tracks all over their rich pastures, the states of the Union; that they are in general a most unproductive and most disagreeable group; that they cost charitable and correctional institutions and organizations millions a year to take care of them; that they corrupt the young and rob the older; that they disseminate disease, perpetrate and encourage crime, and maintain indecent standards of living.

I would point out, first, some movements toward a reduction of vagrancy, and secondly, some vitally necessary things that have not yet been undertaken. First and foremost, we must deal with the tramp-evil along broad and national lines, probably not by federal laws, but through state laws and with the keen sense of the national character of the problem. Our methods must be tested, not primarily by the question whether they will rid the particular community of tramps, but whether they will, when adopted in general by other communities, tend successfully to reduce vagrancy and its attendant evils.

First then, I cite the agitation for farm colonies for tramps and vagrants. New York State established, in 1911, a board of managers of such a compulsory farm colony, "for the detention, humane discipline, instruction and reformation of male adults committed thereto as tramps and vagrants." This is an experiment, brought to its present stage by a strong group of social workers in New York who have become sick and tired of the palliative and trivial treatment of the tramp-evil in the past. The colony will have not less than five hundred acres; will be probably from fifty

to one hundred miles from New York City; will receive persons on indeterminate sentences of a maximum of eighteen months, except such as since arriving at the age of sixteen have been committed to a penal institution. The colony will probably be largely upon the cottage plan, and will maintain a system of marks and merits, privileges and deprivations, and a system of parole.

What will be the result? Prophecy is dangerous. It is believed that the best weapon with which to fight vagrancy is compulsory work, just as there is nothing like water with which to fight a large fire, although chemicals may suffice with small blazes. Wherever work is announced at workhouses, jails, almshouses and other institutions and organizations, the attendance of the loafing vagrant falls off. Wherever in cities the mendicancy squads are active and persistent, the city is to an extent relieved of the influx of the panhandler and the whining, shuffling man who has work to go to on Monday.

The farm colony will combine compulsory work with a long enough term of imprisonment, even under restricted liberty, to make the predatory vagrant careful about travelling through the state or seeming to be for a considerable time without employment. And I would say here that the law expressly states that the colony is not meant for "reputable workmen, temporarily out of work and seeking employment." The courts will be notified by the board of managers of the colony, when it is ready to receive inmates, that the colony is meant not for those tramps who can be readily swung back into industrial life and self-support, but for those "customers," as the Germans call them, who have purposely and persistently defied the efforts of the law and of the community to make them decent citizens.

Hence, it is reasonable to expect that the total number of vagrants in the state will be reduced. "But," says the inhabitant of New Jersey, "you are simply throwing the tramps into New Jersey and Connecticut." True; but the advice of New York will be that both New Jersey and Connecticut establish farm colonies. Then, in two ways, the deterrent influence of the colony will be more or less potent. For those who pass through the colony, the idea of giving another year or more to the service of the state at hard work, if again convicted of vagrancy, will not be agreeable. For those who have shunned the colony by staying in another state, the deterrent effect of the New York colony is obvious.

In short, the farm colony is simply typical of what in general the method must be of counteracting vagrancy. The tramp is the most volatile of all dependents or delinquents. Pages of proof can be presented of this fact, and perhaps most striking of all would be the facts gathered from juvenile institutions.

Will the colonies reform the shiftless, work-shy tramp? Probably not to any great extent. In individual cases, yes. But I am firmly of the opinion that to reduce vagrancy we need to employ strong and persistent corrective measures. I have this last summer visited the leading labor colonies of Belgium, Holland and Germany. Everywhere the testimony is the same, although some of the colonies have been in existence nearly one hundred years. The vagrant on the other side of the water is, in four cases out of five, a repeater, not permanently reclaimable. The great service rendered by foreign compulsory labor colonies is that they act as segregating centers for the half-efficient and intentionally idle, and as a deterrent for those who can foresee that a life of vagrancy will mean frequent compulsory segregation in the colonies. The European countries would not think of giving up the forced labor colonies, but they do not make claims that they are reformatories. We in the United States must not allow ourselves to hail the new farm colonies as reformatories or as strong factors in the elimination of the tramp. I have no belief at all that the tramp can be eliminated so long as the world takes summer vacations, and rich people follow their bent and go to Florida in the winter, and so long as Cook's tours find a justification for being. The tramp has the same desires, but not the same means. Being without means, he tramps, or, as I have already said, he rides.

This leads to the second point. We must bend our best energies to the reduction of railway trespass. I believe no one wishes this reduction so much as the railways themselves, for they are the chief sufferers. Where the individual community suffers somewhat, the long trunk lines suffer grievously. Apart from the hundreds of thousands of dollars lost by our great railways, the lives of trainmen are frequently imperilled. A state of warfare exists between the trainmen in general and the tramps in general, although exceptions to the "state of war" exist, of course.

What are the results of railway trespass? First, the loss to the railroads in property destroyed, stations burned, obstructions

placed on tracks, signals tampered with, lives lost, persons injured—and, indeed, the not infrequent suits that are brought by tramps themselves for injuries sustained while riding, or while walking on the railroad.

Then also the cost to the community. Railroads will literally "dump" a group of tramps upon a village or a town. The village reasons with justice that since the railroad gives, therefore let the railroad take away, and is frequently known to load the tramps upon the next freight. Or the justice of the peace or the police court judge suspends sentence on condition that the tramp betake himself to the next settlement, where the next judge may still further pass him along, or send him to the local jail.

How can railway vagrancy be reduced? By making the cost of maintenance of vagrants and tramps in correctional institutions a state charge. Just as long as the local authorities have to stand the expense of the imprisonment period of tramps and vagrants, just so long will the passing-on system continue. Railroad detectives may work twenty-four hours a day, only to have the local court release or speed the parting plague on the twenty-fifth hour, because the town cannot afford to stand the expense.

This movement requires legislative action. Such action must be impelled by a strong force. I believe that a national vagrancy committee is a necessary organization. The railroads should be large factors in supporting it financially. Their gain in the reduction of railway vagrancy would be the communities' gain. Therefore, the communities should uphold the railroads in fighting vagrancy, and not look upon their efforts as another example of the persecutions of a soulless group of corporations.

In the third place, almshouses should not be used as the abode or resting-up place for able-bodied workshys. In the absence of "tramp houses" with worktests, one cannot blame the timid farmer's wife from quickly bolting the door and shouting through the crack of the door to the rural tramp to go to the poorhouse over night. That raises two questions. First, will the community establish a tramp house with a work test? Secondly, does not the farmer's wife run a real danger in refusing the tramp food or shelter? Answering the second question first, I would say that the testimony of tramps with whom I have talked is, that the tramp, if not sustaining violence, is not liable to wreak any physical revenge for

not receiving aid. It is a battle of wits. The tramp is generally lying as to his need. He has little admiration for the gullible housekeeper. If refused, he says to himself: "She didn't fall for my yarn." I have lived several years in the suburbs of New York on a farm, and commuted to my work in New York. We have refused many tramps, or offered them work, and we have never suffered any physical harm.

Furthermore, the more violence that there might be, the stronger is the argument for bringing about a change in the present nuisance. We do know, from newspaper articles, of the physical violence occasionally wreaked upon defenseless women. The best way to overcome that danger is to deter the assailants from being in the country at all. And here the "tramp house" with worktest attached will be a potent local remedy. The State of Massachusetts in 1905 passed a drastic tramp law, providing that able-bodied vagrants, whenever lodged by a community, shall be required to render reasonable work in return for food and lodging, which shall be adequate. The result in one year was as follows:

| | | |
|-------------------------------|--------|-----------|
| In 1905, 89 almshouses lodged | 23,341 | vagrants. |
| In 1906, 61 almshouses lodged | 7,900 | " |
| In 1905, 17 towns lodged | 2,711 | " |
| In 1906, 17 towns lodged | 254 | " |

Bringing history down to date, we find the comparative absence of tramps in Massachusetts at present to be the result of the rigid enforcement of the tramp law. "It is the opinion of tramp officer Barrett that most of the tramps who formerly infested Massachusetts in large numbers cross over the state as quickly as they can from Connecticut or New York to New Hampshire or Vermont. The state can readily be crossed at almost any point in a day's travel over the roads. Rather than take a chance of a term in a Massachusetts jail, the real tramps hurry across the state to a point where the law is not so thoroughly enforced."¹

The Massachusetts law further provides that if tramps are to be lodged at all, they shall not be lodged in the almshouses in association with the paupers. In short, the laws of the Bay State are well calculated to make it disagreeable to be a tramp, and the burden of my argument in this paper is that that is the point of view we must adopt in general.

¹ *The Review*, February, 1912.

Is this uncharitable? In no sense. What are the facts? The tramp is of no use even to the moralist, for the latter has other horrible examples from which he can draw his lessons and examples. He is not useful to the labor agitator, for the honest unemployed are sufficiently numerous without the tramp. He is not useful to the charitable societies as cases, or to the hospitals. He is not useful to the prisons, for he is the least susceptible of reformation. To whom is he useful? Not even to himself, for he is a miserable outcast. Then why should we encourage his vice to get the better of his will by being indifferent to the tramp problem? If we are not to be indifferent, we can use but one of two methods, gentle persuasion and charitable help, or rigorous prosecution and drastic treatment. The gentle persuasion and the charitable help are, in my opinion, generally failures; if they are not, why have we not reduced vagrancy? Any one will be apt to say to-day that vagrancy is more widespread than five years ago. Gentle persuasion and charitable help are useful in individual cases, and the spirit of charity toward the fallen and the outcast should never cease out of the land, but we must interpret what we mean by the spirit of charity. To my mind real charity in the problem of the tramp evil is the reduction to the least possible point of bread lines; of free meals and lodgings given by missions, charity societies and prison associations; and the elimination of private or public lodging houses which give free lodging and meals without worktests, or their re-organization into worktest lodging houses. In short, charity in the case of vagrancy means cutting off every chance for the individual vagrant to find an excuse to continue his life of workshyness and parasitism.

This sounds perhaps harsh and hostile, and so it would be, did not my recommendations carry with them provision for constructive assistance to the vagrant, which I shall shortly mention. I cannot too strongly emphasize, however, the folly of looking with tolerance and even pity upon the gradual descent of the vagrant into entire uselessness, instead of performing, if necessary, a major operation upon him early, an operation which, while it will hurt and be drastic, will not endanger life or even reasonable comfort, and will make him literally "sit up and take notice" that life is not one wild ride from city to city and one long series of idle days and debauched nights.

Returning now to our deterrent forces for the reduction of vagrancy, I would put next the great desirability, and even necessity, of having certain state officials to arrest and prosecute vagrants. The graphically designated "tramp officer" is such a one. The state constabulary of Pennsylvania are such. We must protect the rural communities from vicious wanderers of the highway. The village constable is no person to prosecute tramps. In the first place, it is not his business to be a patrolman, and secondly, the farmer who calls him in has to pay fees for the arrest that he makes, if the laws of other sections of the country are the same as those prevailing in the town in which my small farm is located. A mounted constabulary is a great desideratum. Foreign countries have such, and the vagrants and the beggar shun them.

In the next place, persistent effort should be made in all states to do away so far as possible by law with the short sentence and the idle jail. This is not easy. New York has for years sought to establish reasonable industries in the county penitentiaries, but those institutions are under county management, which means often stupid political indifference. So long as counties maintain winter resorts for idle tramps, they can obtain a houseful without publishing any prospectuses. How ridiculous that the very persons who moan and burst into denunciations about the burdens of tramps are often the very ones that show immovable indifference to the jail or penitentiary problem as a penological question, or as anything except a plum for the spoils system!

I have outlined certain reasons for the continuance of the tramp-evil in the country. In the city, which is not a subject for special discussion in this series on rural life, the lodging houses, the complacent five-cent charity-monger on the street, the "rescue-and-advertise-results" missions, the municipal lodging houses without worktests, and the lack of co-operative efforts to deal with the vagrancy question on a large scale and with differentiation of function, are some reasons why we see fully as many vagrants now as we did some years ago. But that is another story.

What shall we do? Organize the national vagrancy committee. Get funds enough and a general secretary of sufficient caliber to engineer a number of movements along the lines mentioned above. The vagrancy business at present is often nobody's business. Its ramifications are so many and so far-reaching that

the charity worker naturally spends his energy on problems more local, nearer home. If there is one problem that should be dealt with on a national basis, it is the tramp problem.

In some states the problem has been forced to the front. New York is fortunate in the group of social workers on public boards and in private organizations who have urged successfully in recent years not alone the tramp colony for habitual tramps and vagrants, but also the establishment of a farm colony for inebriates by the city of New York, and the removal of the city reformatory for misdemeanants from New York City into the country. To catch the tramp young; to cure him if possible of his drink habit; to impress upon him in a tramp colony that tramping is a thing the State of New York does not intend longer to ignore, such are some of the recent moves in the Empire state.

But, along constructive instead of deterrent lines, a national vagrancy committee must make active studies. Inevitably there must be developed in our country some comprehensive form of free employment bureaus, which will eliminate the excuse of vagrants that, being down and out, there is no ready chance for them to get employment again. To the statement that charitable societies already try to "bring the jobless man and the manless job" together, the answer may be made that the general effort to find employment for the unemployed should not have the appearance of charity.

In connection with the development of free employment agencies there should be lodgings at frequent intervals, that is, in contiguous cities and communities where the unemployed may eat and sleep, in return for work done. Never can we conscientiously prosecute the intentionally idle vagrant at all points until we establish a means of temporary employment for him that will remove the plausible excuse that he cannot find employment.

The "way-ticket" plan, adapted from the German identification card, will probably be long in coming into the United States. It is still repugnant to the great majority of citizens to consider being tabbed or "mugged" and numbered. Such measures have been advocated, but their realization is far off. We cannot expect to control the progress from city to city of the unemployed seeker for a job, as is done in Germany. What we can do is to follow the general lead of Massachusetts, and make the entertainment of

the vagrant conditional upon separating such entertainment from that given to paupers, and in return for work.

Along sanitary lines, we can do something by cleaning up the low lodging houses, where the poorest and the most shiftless of the unemployed sleep and "hang-out." Slowly the rules and regulations for common lodging houses are being improved in many cities. The board of health of New York City has recently put in force a rather drastic series of rules and regulations for the government of common lodging houses, after having received the suggested rules in 1907 from two of the large charitable societies of the city, which had compiled them from the experience of many American and foreign cities.

A very tangible method of reducing vagrancy to some extent is rigorously to prosecute begging on the streets or in public places. Abroad the courts make a careful distinction between begging in localities where poor relief is obtainable and in places where it cannot readily be obtained. In our large cities, poor relief for the homeless is accessible, and there should be no toleration of the street mendicant. New York City has suffered for several years from an increased amount of mendicancy, due to the removal in 1906 of the mendicancy squad that had under Mr. Forbes rendered such excellent service to the city under the control of the Charity Organization Society. The street mendicant perverts the charitable impulse without which society cannot maintain its philanthropic work. In the country the beggar has a ground for his story of need, unless there be in the neighborhood a place where he can find shelter, food, and work.

As I have said before, I shall not attempt to indicate the causes of vagrancy. These are in general the same as the causes of poverty, plus, often, the strong desire to wander. The most effective check on vagrancy is the proper kind of education of the young during the years from ten to twenty. The schools, the home and the church must all do their part in preparing the youth for a reasonable, honest and efficient life. Child labor, illness, mental defectiveness, congestion of population, truancy, orphanage, inefficiency, low wages, overwork, industrial accidents, diseases of occupation, the temptations of crime, seasonal and irregular trades; all these causes, and many more, operate to produce the youthful tramp. When they gain possession, the railroad is ready at

hand to bear the boy from his hated surroundings to the wide, wide world beyond the horizon, often a horizon of dismal walls, and sooty chimneys, and slovenly backyards.

Yes, we need a national committee to take up soberly and comprehensively the treatment of the problems of vagrancy. For nearly a half century responsible persons in our country have intermittently emphasized the seriousness of the problem. The time is surely ripe now to act. The so-called larger social movements are well under way. We have our consumers' leagues, our national child labor committee, our national committee for the study and prevention of tuberculosis, our national housing committee, our national association of charity organization societies, and even our national prisoner's aid association. There remain for comprehensive national treatment the two leading causes of commitment to penal institutions: inebriety and vagrancy. These two offenses against society frequently overlap. Should not the next step, or one of the next steps, be the establishment of a national movement to reduce one or both of these great social evils?

RURAL POLICE

BY CHARLES RICHMOND HENDERSON, PH.D.,
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The Canadian central government went in advance of the settlers and covered the Northwestern Provinces with a network of stations manned by mounted policemen. Before there was a population dense enough to organize local courts and constabulary, a well disciplined force, with fine horses bred from Arabs and mustangs, were ready to detect, pursue, prosecute, try by legal forms, and punish lawless men. The isolated farmer and his wife slept securely in their sod hovels beyond the frontier, because they knew that a brave and swift corps of vigilant young athletes, many of them bred in stately homes of England, kept sleepless vigil. Life and property were secure, and the settlers were not obliged to divide time and energy between agriculture and war with anti-social men. The economic results were an adequate return for the cost. Family life was more regular because women and children were safe on the frontier. The wild cowboy and the border ruffian were not produced by conditions. The type of civilization was set high from the start. The church had an earlier and calmer hearing, undisturbed by elemental passions of fear and revenge. A milder and more humane policy with the Indians was made possible, because the occasions of exterminating warfare were reduced to a minimum by prescient action and a show of disciplined, military force at every strategic point.

The traveler in Spain has a sense of security on the trains, even in the desolate regions between Cordova and Madrid, because he sees the quiet armed guard who steps off at each station and receives instructions from the telegraph office, while he takes notice of the passengers and gives polite answers to inquiries or appeals for help. It is said that these State guards are more efficient and honest than the municipal officers. Before this ever-moving vigilant force brigandage has melted away, and dangerous robbers have turned to sheep raising and plowing.

The absence of such a far-seeing policy in the United States did produce bloodshed, loss of property, insecurity and barbaric

customs, and delayed the growth of customs and institutions of culture and morality for two generations. In the prairie and mountain territories individual self-defense was necessary, and the lynching party took the place of orderly legal procedure. The ugly scars of these errors will remain in some parts of the United States for generations to come, and many a page of our history will be black with the stories of the borderland of the mountains and plains. It is not pleasant to look at this story even in retrospect.

In the rural regions of the North the tramp, potential robber and murderer when mendicancy will not provide satisfactory rewards, is the terror of farmers' wives. Bands of sturdy rogues take possession of freight trains and have a way of silencing the protests of conductors and brakemen, while they steal rides for the gratification of wanderlust and base appetite. Innocent lads are cajoled into the nomadic and predatory life by the pictures of freedom and idleness which the older vagabonds paint for the imaginations of persons too young to realize the dangers of rheumatism and venereal poisons.

To meet these and kindred evils there is no adequate organization of police. Public attention has often been called, even by President Taft, to the absurd and dangerous delays caused by criminal procedure whose technicalities are an invitation to crime, a promise of immunity. Less attention has been given to the equally urgent necessity of improving our means of apprehending culprits and furnishing evidence for the prosecution of offenders. The value of a rural police as warning and prevention has seldom been discussed as it deserves. When the conflagration of violence and robbery has spread beyond control the forces of law are set to work to check it, all too late. The judicial mill cannot grind without its grist of detected offenders and the proofs beyond reasonable ground for doubt.

Let us support personal opinions by recognized authority. In a standard work by a master of the subject we read: "Most foreign countries have a system of centralized rural police, or *gendarmerie*; but no state in the Union has ever organized such a force, except that sometimes there is a special police to detect illegal sales of liquor. The rural peace officer in America is commonly the constable, elected by popular vote and wholly inadequate for any emergency."¹

¹ A. B. Hart, *Actual Government*, p. 575.

Speaking of forms of brigandage in certain parts of the country, Mr. Bryce says: "Brigandage is due to the absence of a mounted gendarmerie in the vast and thinly-peopled Farther West, and there is no gendarmerie because the federal government leaves the states and territories to create their own, and those unsettled communities, being well armed, prefer to take care of themselves." He raises and answer the question: "Why not create an efficient police? Because crime is uncommon in many districts—in such a district, for instance, as western New York and Ohio—and the people have deliberately concluded that it is cheaper and simpler to take the law into their own hands on those rare occasions when a police is needed than to be at the trouble of organizing and paying a force for which there is usually no employment." (*"The American Commonwealth,"* ed. 1889, Vol. II, pp. 439-440.)

The British observer, in this instance, is rather indulgent to our defect and his explanation is too favorable. It is a national shame for a crowd of men to take the law into their own hands, and it breeds ruffianism and disorder. It is intolerable, and the moral forces of the people must be made to react against it; statesmanship ought to provide regular and legal defense of life, order and property.

We have legal precedents for commonwealth organization of detective service. Massachusetts found it necessary to have a state constabulary to enforce its law prohibiting the liquor traffic, and retained the organization for other purposes after the law was abolished. Rhode Island had a similar experience. South Carolina, in adopting its system of state dispensaries, introduced a state force to make it effective. Connecticut, in 1903, established a body of state police. Bitter experience with conspiracies of miners revealed to Pennsylvania the powerlessness of county authorities in presence of organized law-breakers. The Texas rangers, organized by state authority in 1901, have been found helpful in suppressing outbreaks near the Mexican frontier. Arizona and New Mexico appear to be satisfied with a similar experiment.²

The law is the law of the state. Municipal corporations have no original authority to enact legislation; their ordinances cannot go beyond charter limitations. The enforcement of law, the punishment

² John A. Fairlie, *Local Government in Counties, Towns and Villages* (1906), pp. 268-271.

of crime, the prevention of dangerous acts are all functions of the commonwealth. And this with good reason: it would be intolerable to have an independent law-making authority set up within the territory of a state. No local community can be permitted to become a nursery of criminals, a cave of Adullam serving as a resort for dangerous elements. Horse thieves and burglars will not restrict their malignant activity to the township of their residence. They may even spare their neighbors and live by spoiling persons at a distance.

The criminal of a city go out to plunder rural banks and stores. The common interest does not stop at city lines. The common enemy must be caught where he can be overtaken. The recent extension of trolley lines into the country and the introduction of swift automobiles have widened the field for professional burglars of cities. Against these trained villains the thin safes of country merchants and banks are mere tissue paper.

The rural constabulary is no match for city bred criminals, skilful in the use of dynamite and electricity, and shrewd in studying the hours best adapted for their exploits. The sheriff at the county seat is a toy in the hands of a professional sneak thief or burglar. Even if he can spare time from collecting the fees which fall to him as spoils of his office, he has no natural or acquired qualifications as a detective; he is both awkward and ignorant. Local agents of peace and justice have only a local knowledge of persons bent on crime, usually those who are most harmless, stupid inebriates, naughty boys whose mothers have neglected to spank them. Rural sheriffs and constables know nothing of the sleek, well dressed, polite criminals who reside in comfort in the city and put up at the best inn of the country town while planning to rob a bank or a merchant's cash drawers. The big, burly sheriff is a baby in cunning when pitted against a wily safe-blower who from childhood has lived by his wicked wits and fooled professional detectives. The rural officials are made cowardly by their habits of life; they know nothing of the daring which is characteristic of urban firemen and policemen who face death daily and never think of shrinking. A desperate fellow may dynamite fish, contrary to law, in a lake near a state university; but farmers and professors are afraid to inform, and county officials are too timid to arrest. State game wardens, just because they move about on large areas, seem to have some

influence on killing game out of season, but their organization leaves much to be desired.

What is needed may be inferred from the statement of essential facts in the situation. We need a larger unit of police control; under our political arrangements the governor is the natural head of all the forces of public safety. It would be a good beginning to clothe the chief magistrate of every commonwealth with authority to direct county sheriffs and to hold them to strict account. But a more important measure would be to furnish the governor with a complete and thoroughly organized corps of detectives, plain clothes men and mounted police, under a professionally trained chief responsible to the governor for methods and results. In the central office would be found an identification bureau, with Bertillon and finger print records, in close and regular correspondence with the federal bureau of identification; and this office would furnish descriptions at a moment's notice for any point in the state or elsewhere. The state police force of a state would co-operate with those of other states in matters of detection, arrest and extradition. Suspicious characters in villages and cities would be kept under espionage and plots would be discovered and thwarted. Of the necessary legal adjustments between municipal police, sheriffs and the state force this is not the place to write. Such adjustments could easily be made in accordance with precedents already established.

The men of this country owe it to the wives and daughters of farmers to provide for them better protection. Self-appointed patrols are not enough, and the state ought not to leave private citizens to guard their own barns and homes. The insolence, the fierce passion and the dangerous brutality of certain types of negroes in the South could be effectually curbed by a guard of mounted police. It is the hope of immunity which nurses sexual passion into assault. Animal impulses meet with their best counter-stimulus and inhibition in the frequent and unexpected appearance of alert and omnipresent mounted policemen.

Certain results may fairly be expected: In the war with crime it is essential to make the way of the transgressor as hard as possible, and, at the same time, open ways to honest industry. Wild animals disappear before the hunters of civilization. Gangs of criminals are like predatory animals and must be harried and

watched until this mode of living becomes unendurable. Swift and sure justice begins with a trained corps of detectives. All admit that mobs and lynchings are a disgrace and menace to our civilization. They arise out of prolonged neglect and frequent miscarriage of justice. They would diminish and disappear with a well disciplined and effective rural police.

VILLAGE PROBLEMS AND CHARACTERISTICS

BY EDWARD T. HARTMAN,
Secretary, Massachusetts Civic League.

A village, in the sense in which we use it here, is neither grass nor hay. Its problems are radically different from those of the open country, but it has not settled itself into the well regulated ways of a proper urban development. The grass in the meadow may not at once become hay in the stack without undergoing a certain curing process to adapt it to the needs of its new environment. The village stage is the curing stage in urban development. The village problems are serious or light in proportion to their advancement toward substantial and ideal urban conditions.

Those of us who are interested in the village problem have no claims for the superiority of urban over rural conditions, but they are different, and when urban conditions commence they must be met by changed methods because of changed relationships. In the change of methods lies the seriousness of the entire village problem.

The most necessary consideration is of a sane, constructive program. This program is the same whether we live in a rural or urban environment, but when the transition from the one to the other condition begins to come, the seriousness of the problems increases and differentiation and apportionment among the items of the program become matters of pressing concern.

The complications begin in the village where the proximity of people gives to their actions and customs a more than personal significance, because they affect other people. It is here that the community is born, if it gets born on time, and that regulation of the actions of the individual by all becomes a necessity. In the failure to adopt and enforce these regulations lies the essence of village difficulties. Failure to attend to the constructive side of the community work forces need for greater and more serious activity on the remedial side; and here failure is a common condition because the very causes of failure in constructive work are still more apt to produce failure with remedial work.

The fundamental items of a constructive social program are the home, the church, the school and play and recreation. These are serious and too much neglected items in a rural program, but they assume new meanings under village and urban conditions. These new meanings first show themselves when urban conditions have their beginnings in village development. They too commonly go without proper consideration and failure in this adds to the seriousness of remedial problems, which are anyway always present through accident, failure and injustice.

The remedial items of the social program, police, courts, jails, hospitals, charity, settlements, are all going to find useful work to do even in the best regulated communities until a new era has come and decreased the amount; but their work is greatly increased through a too late attention to the constructive items, and through over-emphasis of the remedial as an end within itself.

Let us briefly consider the items of the constructive program. The home is a thing of the spirit, but it must have a physical setting. The problems of this setting, those connected with the housing problem, are greatly complicated by every step towards urban conditions. A bad house often renders a home in the true sense impossible and it adds to the seriousness of the problems of morals, health and poverty. But in the village it begins to affect other houses and the lives and property of others than those who live in it. It is here that the people as a whole must begin to regulate, through laws affecting construction and maintenance, in order that each family may have a chance for what is right and that it may be in a measure forced to what is right for the good of others.

Here the village too commonly fails. It refuses to recognize the problem till most serious conditions are self-evident. And when they become evident the village too commonly aims at developing the remedial institutions rather than at improving the home so that it may properly do its work.

And so it is with the other items, the church, the school and play and recreation. They do not soon enough functionize or they develop needless functions. The village church is too often two or three churches which struggle for existence rather than for accomplishment. The village school is too apt to educate for unfitness. The play and recreation facilities are either wanting or unsupervised, the latter being worse than the former. But there are signs of a

new era in all these respects. A recognition of the importance of the house as a constructive and preventive implement is growing, the functional development of the church is receiving attention, schools are beginning to educate for the needs of the environment rather than for the needs of some different environment, and supervised play and recreation are beginning to be developed, even in the smallest communities. This is an era of hopeful progress. The inter-play of thought between country, village and city is bringing out with constantly increasing clearness the nature of their problems, the variation of the problems under different conditions, and the relation of the various problems in the social program of the community. People are learning, too, that when the home approaches the ideal of effectiveness; when religion stands for a broad citizenship and does not tend towards community quarreling, and when our religious plants are as much used as idle; when education really leads toward something, toward mastery and the ability to do the things at hand, and when our school plants are more used than idle; when we see in play the real chance of the child to grow and in recreation as great possibilities, because of the inherent demands of humanity for recreation, as are recognized by those who have commercialized recreation, we shall then have so promoted justice, reduced accident and lessened failure, that much less is left for remedial institutions to do and that then they gradually cease to be the unhappy burden, both in energy and money expended, which they are to-day.

We can perhaps best get at the spirit of the village by considering its attitude toward certain of our remedial institutions. This attitude is not so important as that toward constructive institutions, but it is more evident. To fail to keep a boy well is not so striking to us as to fail to try to cure him when he is ill. To fail to make honesty the natural thing is to us not so serious as to fail to do something with a thief.

The village point of view toward crime is serious. Whatever the fundamental causes of a crime may be, it is most damaging for a community to fail to recognize and handle it. Failure may not be more common in villages than in cities, but failure in villages is more obvious. To illustrate:

In a certain village where live many cultured people there are many bad conditions. These conditions are, briefly, that gambling

joints run "full blast" from time to time; lewd girls, both mulatto and white, ply their trade without molestation and to the detriment of the health of many young men; the drug stores seem to sell liquor to anyone who wants it, although it is a no-license town; warrants issued for the arrest of disorderly men "have quietly *not* been served."

With this as a foreground, we find in the background a body of selectmen who say they have no authority to enforce the law in such matters, and the judge of the local court is reported as slow to act and as inclined to leniency with even old offenders.

All this prompts a citizen to send out a plea for the assistance of outsiders in the formation of a general law and order league and perhaps the establishment of a state constabulary, which would make possible the enforcement of law in the different localities in an impersonal way.

Experts consulted gave significant conclusions. One of them started his reply with this sentence: "On the question of the lying down of —, I do not know." He said more, but this is enough. Another said: "If there is any local public sentiment the matter can be reached through the local officials; if there is none the community deserves on the whole about what it gets. This constant effort to obtain good government by changing the method of procedure without getting at the root of the matter would be really amusing if it had not an element of pathos in it."

These comments are pertinent. The description of conditions might equally well be applied to many other towns. The citizens of these towns are too indifferent to make the promptings of their civic conscience amount to anything. They dislike to take action because it is unpleasant to proceed or appear against a neighbor, even though he be a bad one. The impersonal nature of law enforcement in cities makes it much easier to secure official action there than in towns. A crystallized public sentiment will produce official action. But however much we may be inclined to criticise in any particularly bad case, it remains true and always will that there are serious elements in law enforcement in villages.

A Massachusetts law of 1909 made it illegal to sell blank cartridges, toy blank cartridge pistols, fire-crackers over two inches long, etc. The enforcement was placed in the hands of the state police, who were interested and determined. The following Fourth

was like a New England Sabbath. If enforcement had been placed in local hands many violations would have occurred.

But state police cannot and ought not do everything. The curing stage must be hastened and citizens in small groups must do their duty the same as in large groups.

Failure to recognize both cause and cure for difficulties is common among villages. A citizen appealed to a private society for help. His village was small and isolated. A kitchen bar was operated for years till finally a man was employed to secure evidence, which he did, and the place was closed. That night the young hoodlums of the town painted the investigator's house black. It was not done by foreigners, for there were none, but by the sons of some of the villagers. What could they do with them? There was no playground nor any chance for proper recreation, but "the children could play everywhere." Questioning showed that they could play nowhere, for they had been arrested for playing in both streets and vacant lots. Perhaps the chief cause of the difficulty was here. As to a method of handling the immediate case, was there a probation officer? Yes, but he lived in an adjoining village, where he and the judge, whose appointment he had helped to secure and who had appointed him, held high court of mutual admiration and paid but little attention to the needs of the district.

The problem of illegal liquor-selling is common throughout the country, but it is most flagrant and injurious in villages where it is so easily obvious when it occurs and where the officers will not prosecute their neighbors and where public opinion for a like reason will not prosecute the officers. Such conditions as have been described develop or permit the development of immorality and crime which, together with the often consequent poverty, render many villages veritable beds of iniquity and misery.

This black picture stands out in marked contrast with villages where early recognition of bad conditions is followed by prompt action for prevention and cure. An interesting example of a regulation of a bad condition may be seen in one village where a college is located. By a tacit understanding a hotel keeper is allowed to sell liquor under a government license so long as he sells to no students and no minors. The procedure, while questionable, is effective. A higher development of public opinion in the same direction generally renders illegal selling a most dangerous and

unprofitable business. This is the goal to which all villages must come if they are to improve to a satisfactory degree in every part of their organism.

The spirit of this village with the restricted type of law-breaking is interestingly shown by another development brought about by its citizens. A child which was not very strong always became ill when it went to school. The mother finally looked into the matter, drew others around her and conducted an investigation. The schools were found to be badly ventilated and dusty. To handle the work effectively a school alliance was organized. The work of this alliance discovered other needs and a more comprehensive League for Social Service was the result.

Twenty-eight organizations made up the original group. Others have been added, each paying three dollars a year towards the general management. Individuals join and pay one dollar. But the function of the league is the interesting fact. Every appeal for help, wherever it may come among the groups or individuals in the league, is referred to the agent in charge, who is a trained social worker. She investigates the case and decides what should be done, referring the applicant to the organization which has previously agreed to do that particular kind of work.

In the village were found a number of families where both father and mother had to work in factories. Their children were locked in, or locked out, or otherwise left to their own devices, much to their injury. A day nursery was developed and the children are now properly cared for. A proper adjustment of our industrial system will some day enable the mother to stay at home and look after her children.

Quite a group of people, many children among them, were found to be a quarter of a mile from the village water supply. It was neglected because it would cost quite a sum of money to make the main connection and there was no leader. The league raised a fund of one hundred dollars, made the connection and supplied a few families. From these it gradually collects the costs, which will be used in extending the system till all are supplied.

Difficulties in the overseers of the poor and the school committee were remedied by pointing out where the trouble rested. Public opinion soon righted the situations.

There will be slips and failures, but this village has the right

idea and it will avoid many difficulties common to village life, even though it may make some mistakes in carrying out its work.

The purely co-operative spirit is needed to a far greater degree than may be commonly found in American villages. The people of Denmark have pointed the way and England, Scotland and Ireland are far ahead of us. Many of the most difficult and often insurmountable problems of the rural districts may be solved in the village through co-operative effort. Take such a simple matter as appliances for the sick room. Only the wealthy can afford them. It is almost out of the question to have them in the country but the cities have them in hospitals and elsewhere. What can the village do?

One village has solved the problem through the organization of a Samaritan Association. It saw the need, raised some money, purchased two hundred and twenty-one dollars worth of supplies, rented a room and employed a custodian. For over twenty years this equipment, which now invoices at nine hundred dollars, has been serving the people. When there is accident or serious illness the needed articles are loaned just as are books from a library, except that a requisition from a physician accompanies the application. Some of them help the patient and also remove much of the burden of care from the attendant wife, husband or relative. They consist of special beds and lifting chairs, wheel chairs, electric batteries, hot-water bags, ice-bags, oxygen inhaling apparatus, syringes, steam sterilizers, thermometers, window tents and similar appliances. During the first year there were seventy loans, while for 1910 there were 510 loans and 224 families were assisted.

But this is merely an illustration. What has been done in this line may be done in other lines. The sick, the home, the church, the school, the poor, the whole range of village institutions and problems may be carried much farther towards a satisfactory solution by such co-operative processes.

This suggests the question of the types of organization which can be most useful in the solution of the various community problems which naturally have their first development in villages. The ones described above are good. The main thing is that the organization have a definite objective and that this objective be fundamental. Villages have been filled with organizations many of which have proved short-lived because of the superficial nature of their

objective. Of this the village improvement society is a good example. With the best of motives it has too often tried to superimpose something upon a condition which was not adapted to the endeavor. Out-door-art is a common objective. But it is difficult, often impossible, to superimpose art upon ugliness. A proper development in the first instance would have been effective and it is often the only way to reach a satisfactory result. Organizations should therefore aim at fundamental things, at good housing, at home and school gardens, at playgrounds and even at the improvement of the work of the churches and the schools. Along with these must come work for improving governmental methods and an improved ideal as to the functions of government. A public authority can not go ahead of public opinion and private organizations are always necessary to develop this opinion so that it may support progressive authorities and stimulate to action those which are backward.

There is another group of village functions, which offers serious problems. These are streets, water, sewage disposal, garbage, lighting. Sewage and water are serious as between villages and between villages and cities. It is generally an easy matter for one village to entirely and satisfactorily dispose of its sewage, so far as it is concerned, as soon as it really makes up its mind to it. But its method, satisfactory to itself and its inhabitants, may pollute the water supply of dozens of other villages and cities. This complicates the problem for the individual village; for it must effectively rid itself of its sewage and do no harm to any other place.

Increasingly therefore must villages develop self-contained systems of sewage disposal. This may sometimes be accomplished through filtration, or by spreading the sewage upon the land. But the growth in the number of villages and the growth of the larger urban centers render a different system, such as bacteria beds, more and more imperative. This will be expensive, but nothing near so expensive as failure to do it. It therefore promises to be one of the most serious problems confronting the village of the future. It will have to receive the attention of local authorities and it is worthy of the efforts of our strongest private societies and individuals. The collective loss induced by failure will always overbalance the collective cost of doing the work properly. It is not characteristic of villages to face these things soon enough. The

result is that almost irremedial damage is constantly being done and enormous loss of life and money is the necessary cost of an effective public opinion.

At the risk of repeating let us point out again that the great need in the village is for a community consciousness. The village here suffers a severe handicap. It has problems of a serious nature and it has not the impersonal nature of law enforcement which is common in larger places. In the village a man knows all his neighbors. In the city he knows almost none of them. To do the work of the village properly there must be a fundamental understanding of the problem and a determination to work unitedly towards its solution. This calls in the village for a community sense which is different from that in the country and greater by far than that even necessary in the city.

A good way to develop this spirit is to work out elementary activities embodying the principles of team play. In the game of football, racial, credal, political and even caste differences disappear. With this example we are naturally led to the conclusion that a community enterprise along the lines of sport or recreation, something having these elements though it may have many others, will help to bring the people together, to learn to work together. When they learn it in one way it is an easy step to use it in another way.

The village pageant is a good example. Its success as a whole depends upon the successful working out and performance of its most minute parts. It has been and is being used with the best of results. It varies from a general celebration of the Fourth, so developed that the whole village comes into its activities, to formal pageants recounting the history of the village or illustrating the evolution of education, religion or politics. This movement promises to lead us into new ways of life, to give an impetus to literature, to dignify recreation and to give us that community consciousness which will solve our practical village problems. It will at every point put us on a higher plane.

A quotation from the introductory statement on the program of a recent village pageant of games and dances will let us at once into the spirit of the movement:

"These singing games and dances are now the games of children or of peasant maidens. When the world was younger they were the amusement of courtly dames and of finished gentlemen.

Some of them have been played by Egyptians and Aryans, Greeks and Romans, and some, before they were games, had their basis in ceremonial rites and customs. Long ago the children, after the manner of children everywhere, copied in play what their elders performed in sober earnest, and through the centuries the child of twelve taught the child of six the same words and actions it had learned from its playmates. From land to land games and rhymes diffused and descended till they reached the age of printed books and countless libraries, an age of haste and unrelenting toil in factory and mill. There they perished and to-day we glean but a few scattered and unregarded fragments of the past store.

"But we still have with us the spring, the season of expectation, and the autumn with its ripened harvest. May we not hope that when the world has become used to its new tools, and their perfection has lightened the burden of toil, the spirit of joy will again return and express itself in forms old and new."

As the child grows through its play, more than through any of its other activities, so, it seems, we may look to the play of communities for a source, perhaps the best one, of growth which will help to solve community problems. With the community as with the child, the period of play is a period of receptivity, of frankness, of open-mindedness. It is not too much to say that no discussion of the dry bones of government, and no adoption of any articulation of them, will ever do as much for our villages as these harmless, helpful, moulding activities which lead village people out of self-consciousness and selfishness into the spirit which sees, appreciates and adopts.

It is the spirit rather than the content of law which rules among honest people. The villager must therefore develop the spirit of law, the spirit of usefulness rather than harmfulness to the neighbor which changed conditions have brought into close physical relationship with him. For this spirit, which little needs to exist in the country and which can hardly exist in the city, is absolutely essential to the village.

If our interpretation is accurate the village may have something which is hardly to be found in any other state of society. It must have it if it is to succeed. The development of it is the essence of the village problem.

BOOK DEPARTMENT

NOTES

Anderson, B. M. *Social Value*. Pp. xviii, 199. Price, \$1.00. Boston: Houghton, Mifflin Company, 1911.

This is not a book for the uninitiated; it is for the inner circle of those interested in the more abstract phases of economic study. Beginning with a criticism of the Austrian interpretation of value the author critically examines the psychological and sociological background of economic theory. This examination has a double significance. In the first place it throws into bolder relief many of the difficulties and errors of current reasoning on subjective value. In the second place—and more important than this—it justifies, in spite of its own abstractness, a broader attitude on the part of the economic theorist than is now prevalent. This virtually amounts to a criticism of current methodology. To afford significant results, economic theorizing must not pursue the method of heroic isolation of "purely economic" phenomena. Economic interpretation is valid only when from its special viewpoint it recognizes all factors in terms of their broader social values. The treatment would have left a stronger impression if it had avoided occasional, gratuitous, personal estimates of the eminence of contemporary thinkers. As personal judgments, these count for little; as adumbrations of the "social mind" they are superfluous.

Bligh, S. M. *The Desire for Qualities*. Pp. xii, 322. Price, 70 cents. New York: Oxford University Press, 1911.

Once in a long while the reviewer comes across a book that warms the very cockles of his heart. He little realized that such a treat was in store when he picked up this little volume and pondered its title. The author shows rather unusual and desirable qualities himself; he knows the field and its present literature; he is able to state succinctly and fairly contrasting viewpoints; he has a gift of expression that results in many a pleasing phrase. The whole discussion is most suggestive and stimulating.

The author believes that hitherto the psychologist and the moralist have lost the advantages they might have secured by co-operation. To suggest common ground is one of the book's main objects. The psychologist "needs more than anything else to throw himself more heartily into the practical business of life." "The moralist has to give up whatever claims he might wish to make for an absolute morality" . . . "Above all, he has to give up the primitive and retaliatory theories which were in the past too generally adopted, and to learn that denunciation is, as an instrument of reformation, almost as much out of date as the pillory or the ducking stool."

In the first chapter is given "the general theory of appreciating some values and depreciating others; in the second the personal qualities which

influenced particular variations; in the third the pragmatic element in valuation; and in the fourth the æsthetic." The fifth treats "the element of social suggestion in valuation;" the sixth, the creation of new values by strong personalities. Psychological Benefits, Self Respect, Mental Discourse, Sexual Standards, Vice and the Treatment of Vicious Tendencies are the heads of the remaining chapters.

Such a fresh, virile, masterly discussion deserves wide reading.

Boyd, William. *The Educational Theory of Jean Jacques Rousseau.* Pp. xiii, 368. Price, \$1.75. New York: Longmans, Green & Co., 1911.

Boyle, James. *The Initiative and Referendum: Its Folly, Fallacies and Failures.* Pp. 120. Price, 30 cents, paper; \$1.00, cloth. Columbus, Ohio: A. H. Smythe, 1912.

This little pamphlet harangues much, but contains no ideas and no information. It bristles with such maudlin phrases as "Revolutionary," "Reactionary," "The Gateway of Socialism," "The Madness of Democracy," and "The Greatest Tragedy of Christendom." It applies the statements of Jefferson, Webster and other of "the fathers" to modern conditions, quite forgetting that those were just the men who could reshape their ideas to fit new conditions. The book is best described as the fanaticism of the standpatter. It may have a little value, however, if it points out to the opponents of the Initiative and Referendum the kind of arguments they should not use.

Bradford, Ernest S. *Commission Government in American Cities.* Pp. xiv, 359. Price, \$1.25. New York: Macmillan Company, 1911.

Brode, H. *British and German East Africa.* Pp. xiv, 175. Price, \$2.10. New York: Longmans, Green & Co., 1911.

Burton, Theodore F. *Corporations and the State.* Pp. xvi, 249. Price, \$1.25. New York: D. Appleton & Co., 1911.

Cadman, S. P. *Charles Darwin and Other English Thinkers.* Pp. ix, 284. Price, \$1.25. Boston: The Pilgrim Press, 1911.

This publication, a series of lectures delivered before the Brooklyn Institute of Arts and Science during the autumn of 1910, has added another to the list of books that have endeavored to end the long and unreasoning conflict between science and religion. The lectures give, in a clear and popular style, a sincere religious interpretation of the life and work of the nineteenth century intellectual leaders, "whose teachings have been thought to stand in irreconcilable contradiction to the essential truths of Christianity." The author states his belief "that a new day has dawned for the Christian Church, in which she can fearlessly, and yet reverently, utilize their newer conceptions for the enrichment of the generation she seeks to serve."

Even the prejudiced reader would be won by the story of Darwin's inspired conception of the evolution hypothesis, and of his patient life's labor to learn God's methods of creation. The picture of Thomas Henry Huxley, Darwin's brilliant and intrepid defender, is a forceful one. One cannot but admire this energetic worker and brave agnostic, the foe of bigotry and materialism alike, and apostle of our new age of scientific

religious liberty. The treatment of John Stuart Mill is scarcely so sympathetic, although the genius and influence of "the saint of rationalism" are recognized. Irrelevant criticism of Mill's personal life gives way at last to an appreciation of the prophet of the religion of humanity.

The lectures on James Martineau, probably because of their theological content, are longest and least interesting. The presentation of a strong and earnest personality, perhaps too little known to the present generation, is, however, significant. When materialism was dominant, Martineau's intuitional philosophy pronounced "the divinity of man and the immanence of God," though he lacked Christ's social gospel of a regenerated humanity. The last lectures deal with Matthew Arnold, the proud, bookish exponent of culture and implacable foe of Philistine complacency and sectarian narrowness. Arnold saw the evils of unrighteousness and injustice that denied to men harmonious development, but failed to touch the throbbing hearts of his fellowmen.

Dr. Cadman reveals the sincerity and courage of these giants of modern thought—these truly religious prophets of man's freedom in his age-long search for God.

Cambridge Medieval History. Volume 1. Pp. xxii, 754. Price, \$5.00. New York: Macmillan Company, 1911.

Chapman, S. J. *Outlines of Political Economy*. Pp. xvi, 413. Price, \$1.25. New York: Longmans, Green & Co., 1911.

This work is designed for beginners and is well adapted to their needs. Definitions, contrasts and summaries are regularly clean-cut, and are made in such a common-sense way as to be easy to follow. Doctrinally, the work follows Marshall rather closely, but the handling of material is so distinctive that the book has merit quite beyond its value as a textbook. Particularly useful are the diagrams and illustrative tables.

Clark, L. D. *The Law of the Employment of Labor*. Pp. xii, 373. Price, \$1.60. New York: Macmillan Company, 1911.

At least two difficulties have regularly confronted the general student who wishes to become acquainted with the status of the labor law of the United States. In the first place, the compilation of the labor laws of the states and the United States has grown to be a volume of discouraging bulk; and treatises bearing on these laws and their interpretation have usually been equally forbidding. In the second place, the items of legislation change so rapidly that any detailed account has very short-lived value. Under the circumstances, there has been real need for a volume that would in limited scope afford a convenient background for the understanding and interpretation of recent rapid advances in the field of labor legislation. This has been well done in the volume before us. It affords a summary and general view of statutory regulations and of their legal construction and effect, as well as the common law in its application to labor.

Representative cases and statutes are cited in a manner adequate to give any student a summary view, and further study is made easy by ample references.

Devine, Edward T. *The Spirit of Social Work.* Pp. xi, 231. Price, \$1.00. New York: Charities Publication Committee, 1911.

Doherty, Phillip J. *The Liability of Railroads to Interstate Employees.* Pp. 371. Price, \$3.00. Boston: Little, Brown & Co., 1911.

Edwards, Albert. *Panama.* Pp. x, 585. Price, \$2.50. New York: Macmillan Company, 1911.

A popular history of Panama is welcome at this time. Mr. Edwards has presented in an entertaining style, the history of the canal, the country and the people. The volume opens with two chapters containing the author's observations upon what he saw *en route* to Panama via the Lesser Antilles; then follow seven chapters describing the Canal Zone, Colon and Panama, the Isthmus and its inhabitants. Two-thirds of the book are devoted to a historical sketch of Panama from "The Coming of the White Man" to "The Secession from Colombia." The last hundred pages contain an account of the construction of the canal, the chapter titles being "Beginning Work," "The Boss of the Job," "Pulling the Teeth of the Tropics," "Transplanting Americans," "The Big Jobs," and "Experiments in Collective Activity." Some of the earlier and later chapters of the book first appeared as magazine articles. While the book is more popular than scholarly, it has real merit.

Ewen, W. R. T. *Commercial Law.* Pp. 100. Price, \$1.50. Chicago: Rollins Publishing Company, 1911.

This little volume comprises ten lectures which the author delivered before the Fire Insurance Club of Chicago. The subjects of the lectures are as follows:

1, Contracts; 2, commercial paper; 3, bailments; 4, chattel mortgages; 5, bills of sale; 6, mechanics' liens; 7, attachments; 8, garnishment; 9, real estate, law of descent, real estate trusts, landlord, tenant, etc.; 10, waiver.

Naturally, in a book of one hundred pages, it would be impossible to treat adequately the law of contracts or the law of commercial paper or any one of some of the other subjects which appear in the foregoing list. But to treat them all in such brief compass, is well nigh hopeless. Nevertheless, Mr. Ewen has made an interesting booklet and one which will doubtless be of some assistance to the casual reader. Of course, it is not a book for lawyers or for business men who are making a definite study of law. But the layman who desires a concise statement of some of the main principles of business law will find much that is useful in its pages.

Written by a Chicago lawyer and delivered to an audience of Chicago business men, these lectures almost inevitably lay special stress upon the Illinois law. Outside of that state, the book will hardly command a wide circle of readers. But the chapter on contracts and some of the other chapters are of more than local interest, and may be read with profit by a citizen of any state.

A lecture written for a special occasion is usually less likely to be quite accurate than what is intended primarily for permanent use in book form. This fact is occasionally illustrated throughout the lectures in a lapse from

that exactness of thought and expression which one may well expect in a text-book. But on the whole, Mr. Ewen is to be highly commended for the care with which his work has been prepared.

Gell, W. E. *Eighteen Capitals of China*. Pp. xx, 429. Price, \$5.00. Philadelphia: J. B. Lippincott Company, 1911.

Gettell, R. G. *Readings in Political Science*. Pp. xli, 528. Price, \$2.25. Boston: Ginn & Co., 1911.

Mr. Gettell's Introduction to Political Science has already become familiar to teachers of elementary courses in American colleges. A comparison of this work with that shows commendable adjustment between the two. Large classes in our colleges cannot be handled by text, supplemented by outside readings, alone. No library can carry the large number of duplicate texts and reference works needed for consultation by the students of an elementary course. Mr. Gettell's collection will therefore be of service in bringing to the student discussions which would otherwise be inaccessible or obtainable with difficulty, because of the few copies available for use by a large number of readers.

The selections are short and to the point. Many of the assignments made to college students necessitate too much wading through discussions that are redundant or only secondarily written to cover the subject under consideration. Mr. Gettell has succeeded in avoiding these faults. One feels at times that limitations of space have forced him to the other extreme—that the material has become choppy through too much specialization. It is, of course, difficult to cover so wide a field, but one feels that some of the works quoted from are so sure to be present in duplicate in our libraries, or so apt to be used as texts in other courses in political science, that it might have been better to give less attention to them and devote the space to longer quotations from the other material. There are, for example, 504 quotations in 519 pages of text, including twenty-two extracts from Willoughby's *Nature of the State*, seventeen from Wilson's *The State*, over a dozen each from Hart's *Actual Government*, Dealey's *Development of the State* and Lowell's *Government and Parties in Continental Europe*, not to mention works less widely used.

With this exception, the book is well planned. It will be of value for use in elementary courses, especially where the classes are large or the library facilities restricted.

Holmes, T. Rice. *Cæsar's Conquest of Gaul*. 2nd edition. Pp. xxxix, 872. Price, \$7.75. New York: Oxford University Press, 1911.

In his first edition, published in 1899, Dr. Holmes began with the idea of making Cæsar interesting and informing to schoolboys and to some others of a larger growth. He ended by making a book which is generally recognized as indispensable to every serious student of the *Gallic War*, and has found favor with intelligent readers in many other lines. After an account of the previous relations of the Gauls and the Romans, Cæsar's principal campaigns are given in practically his own words. The remaining 700 pages are devoted to the discussion of almost every question which could arise

in the mind of a thoughtful reader. These are treated with full consideration of the literature, which is often exceedingly voluminous, and the conclusions are well supported by evidence, even when one cannot accept them.

In the second edition, which the author somewhat optimistically regards as final, the work has been thoroughly revised and almost wholly re-written. It is handsomely bound and well printed, with very few typographical errors, and provided with maps and plans. There should have been two volumes, as the book is too bulky to handle conveniently, and in some places the beginnings and ends of the lines cannot be read without difficulty.

Huan-Cheng, Chen. *The Economic Principles of Confucius and His School.*

Pp. xv, 756. New York: Longmans, Green & Co., 1911.

Confucianism is a philosophy of life. As such it could scarcely fail to contain elements susceptible of classification along political, economic and other distinctive social lines. Under these circumstances, it is inevitable that a study of any one of these social aspects should carry with it the necessity of canvassing them all. This Dr. Chen has done with unusual zeal and patience. The viewpoint is economic. The organizing of the material along the lines of orthodox, occidental, economic analysis could scarcely produce any other results. But one can scarcely avoid regretting this *tour de force*. Ethical rules, as well as other social standards, are usually open to economic interpretation. But to ascribe to the economic aspects of a discussion of standards such as those involved in Confucianism the status of an organized body of principles, even by implication, has questionable value. It surely detracts some from the value of the two volumes before us. These are rich in material and in suggestive interpretation.

Hungerford, E. *The Modern Railroad.* Pp. xxi, 476. Price, \$1.75. Chicago:

A. C. McClurg & Co., 1911.

Jevons, W. S. *Theory of Political Economy.* Pp. xlv, 339. Price, \$3.25.

New York: Macmillan Company, 1911.

A new edition of an economic classic.

Johnson, C. *Highways and Byways of the Great Lakes.* Pp. xiv, 328.

Price, \$2.00. New York: Macmillan Company, 1911.

Like most of the author's series on Highways and Byways, this one on the Great Lakes seeks rather to give a series of pen pictures of typical scenes and incidents in the region about the Great Lakes than to describe the section as a whole or comprehensively to set forth the life and activities of the people. A few common, often homely, scenes and events are chosen for description that show some characteristic feature or give a picture of the life of the people and their ideas, as brought out in their daily conversations. The book's purpose is not informational; its primary purpose is to give an impression of the region from the human viewpoint. It must be read, therefore, not for the facts it can give, interesting as these may be, but for the same reason that leads one out into the byways on a vacation day in summer. The book treats principally of rural scenes in western New York, along the southern shore of Lake Erie and in the forest sections of Michigan. The copper and iron country of the Lake Superior region

are treated, as also the farming regions of Wisconsin and northern Illinois. The many illustrations that accompany the text are selected for their artistic interest primarily.

King, Clyde L. *The History of the Government of Denver with Special Reference to Its Relations with Public Service Corporations.* Pp. 322. Price, \$1.00. Denver, Colo.: Fisher Book Company, 1911.

The study of municipal government has heretofore suffered from the lack of monographs on individual cities. One of the first to meet this need, both as regards thoroughness and lucidity of expression, is that just published by Dr. Clyde Lyndon King.

This monograph contains much more than a mere exposition of the governmental organization of Denver. It is a thorough study of municipal policy, with special reference to the relation of the city of Denver to public service corporations. The author has also given an illuminating account of the struggle of Colorado municipalities for municipal home rule, and his treatment of the subject throws much light on the requirements of constructive municipal legislation in other states of the Union.

It is to be hoped that Dr. King's monograph will be followed by a series of equally suggestive studies on the municipal organization and local policy of other large cities of the country.

Lands, Fisheries, Game and Minerals. Pp. 519. Ottawa: Mortimer Company, Ltd., 1911.

The Commission of Conservation publishes a 520-page volume on Lands, Fisheries, Game and Minerals. It is well illustrated by a number of maps, diagrams and charts showing mineral resources and products, but the book is quite as much a collection of laws concerning mining as it is discussion of conservation. The large amount of emphasis and space giving definite regulations of various localities and species is probably a tribute to the large part that the visiting sportsman plays in the economic life of the Eastern provinces. The part pertaining to lands is relatively small.

Low, A. M. *The American People.* Volume 2. Pp. vi, 608. Price, \$2.25. Boston: Houghton, Mifflin Company, 1911.

The second volume of Mr. Low's interesting study of the psychology of the American people gives us his survey of the period from just before the Revolution to the present time. The treatment, unlike the first volume, is only incidentally chronological, and the work is therefore more a collection of essays than a logically developed story. After discussing the conditions—social, political and economic—which caused the Revolution, an excursion is made to show the effect upon our national life of the fact that we have no capital like London or Paris which is the center of the country and "like a great spider," has "sucked blood from the provinces." Then a chapter is devoted to showing that in America woman neither reigns nor rules. The characterization of American women many of Mr. Low's readers will find amusing, if not exasperating.

Returning to his semi-historical study, the sociological influences which have controlled American development are considered seriatim. Four fac-

tors dominate American history: hatred of England as a result of war, popular contempt for law, the influence of the immigrant, especially the Irish, and the economic, social and political impulsion of slavery. The influence of the West, of the extension of transportation facilities and of the tremendous natural resources of the country, to omit other elements, are not mentioned. Immigrants have been a blessing, it is argued, and instead of driving out the native laborer, he has driven himself out by his refusal to do the work he considered fit only for Irish, for Germans, for Italians, or for some other newly arrived people. Only in one way has the immigrant harmed us—he has made us a nation without manners, as the author essays to prove at length. For the black man little good is to be said. His influence on the Southerner was disastrous. He “made a whole people brutal and cowardly.” If the author be right in this, it is hard to explain our Civil War. The negro lowered “the whole moral tone of the South.” “For nearly two hundred and fifty years the black man worked corruption,” he “corrupted the morals, manners and character of his white master.”

The last hundred pages of the book discuss the Civil War and the new influences which have come as the result of the Spanish-American War and our tariff policy. The summary of our recent development is not encouraging. After his study of the “Harvesting of a Nation,” as Mr. Low calls his second volume in its subtitle, we are told that “The American brain, up to the present time, has been a distinct disappointment to the well-wishers of America. . . . The American mind has become shallow, almost childish . . . a mind with neither breadth nor grasp. This mentality colors the whole life and thought of the people. . . . It is the American way.” Fortunately for Americans, they are not bound to accept Mr. Low’s estimate of their harvest.

Lowell, P. *The Soul of the Far East*. Pp. x, 226. Price, \$1.60. New York: Macmillan Company, 1911.

Lucas, Charles (Ed.). *A Historical Geography of the British Colonies*. Vol. v, Part iv, Newfoundland, by J. D. Rogers. Pp. xii, 274. Price, 4/6. Oxford: Clarendon Press, 1911.

This little volume, the latest in the excellent series by Sir Charles Lucas, of “histories laying special stress on geographical considerations,” is a charmingly written and valuable study of a little known region. For though “Newfoundland has lived a continuous life and has kept its identity inviolate for more than 300 years,” its relations with the outside world have been few and narrow.

Throughout nearly its whole history, twilight has brooded over this land, and it has remained almost up to date “something more than a fishing ground, and something less than a colony. . . . The visitors who came and went, like tides and winds . . . had the first century to themselves; . . . they lived like seals, and thought like geologists. To them Newfoundland was little more than a sunken fishing bank, with a dry top here and there” (p. 109). For “the Newfoundlanders are men of one idea, and that idea is fish, . . . and in Newfoundland fish means cod” (p. 193).

The volume is avowedly a history, though the author is well aware that it is a history shaped at every turn by forces purely geographic. In the chapters on Fish and Fish-bait, the logic of this geographic control is charmingly presented; for example: "The sea has asserted its sway over the Newfoundlanders: they are wedded with the sea, and their children's eyes change color with the sea! Cod, seal, herring, whale, and the clownish lobster mould their destiny, and their pathway to reality lies through a life dedicated to the sea."

McGiffert, A. C. *Martin Luther—The Man and His Work*. Pp. xi, 397.

Price, \$3.00. New York: Century Company, 1911.

This is a model biographical work. It gives a clear picture of Luther the man; it discusses and estimates his work in a scholarly manner, and it places the Reformer and the Reformation in their true historical setting. The volume will be of permanent value to students of history. The author's style is simple, direct, and altogether pleasing, and this is as true of the many translated paragraphs from Luther's works as of the author's own writing. The numerous illustrations add to the attractiveness and to the value of the volume.

Miller, T. S. *The American Cotton System*. Pp. xi, 294. Price, \$1.50. Austin, Texas: Austin Printing Company.

This book is an attempt by a practical cotton dealer to make clear the processes involved in the grading and handling of cotton. There is a thirty-five-page description of cotton growing all over the world; another chapter on classification, emphasizing the difficulties of making many grades of an almost microscopic fiber which defies all mechanical means of grading. The description of cotton exchanges is detailed, and the book ends with 150 pages of the Arithmetic of the American Cotton System, which will certainly enable one to handle all the operations necessary in the calculation of cotton transactions and which the author hoped might be used as a text by school teachers in cotton-growing sections of the South.

Overlock, M. G. *The Working People: Their Health and How to Protect It*. Pp. 293. Price, \$2.00. Boston: Boston Health Book Publishing Company, 1911.

The title of this book is somewhat misleading. It might better be called: "Health and How to Protect It." Except for very brief discussions on such topics as The Modern Factory and What it Means to the People Employed Therein, the sixty-three chapters into which the 293 pages of the book are divided, deal with general topics of health, *e. g.*, Dyspepsia, and How to Avoid It; Rheumatism, Its Cause and Prevention, and Measles a Dangerous Disease and Why. The style of the book is popular, its language untechnical and in places verbose. It may serve a purpose in popularizing some of the common rules of health. One cannot but feel that a more thorough treatment of fewer subjects would have improved the book. The author should be congratulated, however, on his effort to treat the problems of health and disease from a social point of view.

Paddock, W. *Fruit Growing in Arid Regions.* Pp. xx, 395. Price, \$1.50. New York: Macmillan Company.

This book, by two professors in the Colorado Agricultural College, is a descriptive and practical handbook of an industry which has become of national note in the short time since the first important shipments of fruit outside of Colorado were made from Grand Junction in 1897. The industry is adapted to a surprisingly small area. "Generally speaking, the fruit belt on the eastern slope of the Rocky Mountains, with the exception noted above, consists of an irregular area along the foothills not over ten miles in width. Beyond this distance, the limits of the profitable production of tree-fruits at present are soon reached. Success is due to the protection afforded by the mountain range from drying winds and hailstorms, from cold in winter and from late spring frosts."

Within these limited areas we are having a rapid redistribution of population and the evolution of an interesting type of community. "Irrigation divides and subdivides lands into small home tracts. The best examples of communities of small farms in the United States are to be seen in various parts of California. Here may be found collections of farms of a few acres in extent, and each self-supporting and, in many instances, yielding the owner a good income. These communities often extend over hundreds of acres, and yet the homes are so close together as to suggest to the traveler that he is passing through the suburbs of a large city.

"This centralizing movement has already begun in the Rocky Mountain region, as one may see by visiting the more prosperous communities in any one of the several states, such as the Grand Valley in Colorado, the Cache Valley in Utah, the Willamette Valley in Oregon, the Yakima Valley in Washington, the Payette Valley in Idaho, Bitter Root Valley in Montana, the Mesilla Valley in New Mexico, and many others. We may confidently expect to see this movement increase very rapidly in the near future, and the basis of this intensive farming will be the various horticultural products."

For the prosecution of these horticultural industries the book appears to be a good guide. The introduction is written by L. H. Bailey.

Robinson, L. N. *Criminal Statistics in the United States.* Pp. viii, 104. Price, \$1.00. Boston: Houghton, Mifflin Company, 1911.

This monograph is a brief contribution to the too much neglected subject of criminal statistics. In the introductory chapter the author defines his terms such as judicial and prison criminal statistics, statistics of crime, statistics of criminals, etc. The next two chapters deal with the origin and growth and the essential nature and meaning of federal criminal statistics. In this connection the author makes the important criticism that statistics of prison population taken on a certain day do not indicate the amount of crime at a point of time but over an indefinite period of time. The fourth and fifth chapters describe the state judicial and prison criminal statistics. The faults of these statistics he attributes to four causes; first, that these statistics have been gathered for administrative as well as scientific purposes; second, the ignorance of the principles and methods of statistical science of those who have collected them; third, the indifference of the

officials toward this work, and fourth, political appointments of secretaries of state boards of charities and other officials who have had charge of this work.

The last chapter is on the reorganization of criminal statistics in the United States, and proposes that the federal census bureau prepare a plan for the gathering of these statistics in co-operation with the state governments, as has been done for mortality statistics, and then induce as many of the states as possible to accept it. Unfortunately this chapter is very brief and does not work out this plan in detail. There is added a brief appendix on the increase of crime in which the author criticises those who have attempted to measure the changes in the volume of crime on the basis of untrustworthy and inadequate statistics.

Salcilles, R. *The Individualization of Punishment.* Pp. xlv, 322. Price, \$4.50. Boston: Little, Brown & Co., 1911.

Smith, J. H. *The Annexation of Texas.* Pp. ix, 496. Price, \$3.00. New York: Baker and Taylor Company, 1911.

Thwing, C. F. *Universities of the World.* Pp. xv, 284. Price, \$2.25. New York: Macmillan Company, 1911.

Wood, M. E. *The New Italy.* Pp. xiv, 406. Price, \$1.50. New York: G. P. Putnam's Sons, 1911.

REVIEWS

Adams, Charles F. *Studies, Military and Diplomatic.* 1775-1865. Pp. v, 424. Price, \$2.50. New York: Macmillan Company, 1911.

Under the subtitle, "Military Studies," Mr. Adams publishes four papers on the Revolution, one paper on the War of 1812, and three on some phases of the Civil War. Under the subtitle, "Diplomatic Studies," two papers are published, one relating to the purchase of the Laird ironclads and the other to the attitude of Queen Victoria toward the American Civil War. The chapters on the Revolution include studies of the battle of Bunker Hill, the battle of Long Island, the campaign of 1777, and Washington's use of cavalry. All of these papers are highly suggestive—fine products of historical scholarship combined with very practical experience. Mr. Adams comes to the general conclusion that at the battles of Bunker Hill and Long Island, and in the campaign of 1777, the American forces were so badly led, and their leaders made so many and such serious blunders, that they were saved from total destruction only by the superior capacity of the British for blundering. He further points out that Washington did not, until late in the war, understand the value of cavalry and consequently made little use of it. These shortcomings of Washington and other American leaders were due to those very qualities that had made them first-class frontier-fighters; they were trained to frontier Indian methods of fighting and were not accustomed to the military conditions which prevailed on the

seacoast. Somewhat the same view is taken of the campaign which ended in the battle of New Orleans, in 1815. The British, Mr. Adams thinks, made the worst possible use of the situation. The correct policy should have been to cross the river and flank the Americans at New Orleans. To account for the plan pursued he makes a study of Pakenham's truly British career and character and comes to the conclusion that he was probably irritated into making the fatal front attack by the criticisms of Admiral Cochrane. Under the titles *The Ethics of Secession* and *Lee's Centennial*, he publishes the addresses delivered at Washington and Lee University upon the occasion of the Robert E. Lee Centennial, and at Charleston, South Carolina, before the New England Society. The addresses contain a fine-tempered examination of the controversies over the nature of the American Government. He arrives, practically, at a general conclusion that both the North and South were right. This country owes much to the Adamses, and by no means the least debt is due for these two addresses. The last military paper is devoted to a criticism of Mr. Rhodes' handling of certain Civil War subjects. The author believes that Mr. Rhodes has inadequately treated the activities of the Union navy during the Civil War, the Southern belief that "cotton is king," the destructive nature of Sherman's march through Georgia and the Carolinas, and the military incapacity of General Benjamin Butler.

Under the title of *An Historical Residuum*, Mr. Adams discusses the value or lack of value of personal recollections as a source of history and illustrates by dissecting the recollections of individuals in regard to an incident connected with the purchase by the United States of the Laird rams which were being built for the Confederacy. In the paper on "Queen Victoria and the Civil War," the author criticises the popular belief that Queen Victoria was actively in favor of the Union during the Civil War, and that it was her personal influence which kept the two countries from going to war. It is Mr. Adams' view that Queen Victoria had no particular liking for the North, certainly no love at all for democracy, but that she was, on principle, opposed to war. The failure of England to recognize the Confederacy was probably due to personal jealousies among the members of the British cabinet, not to any personal influence of Queen Victoria.

WALTER L. FLEMING.

Louisiana State University.

Allen, William H. *Woman's Part in Government*. Pp. xv, 377. Price, \$1.50. New York: Dodd, Mead & Co., 1911.

"*Woman's Part in Government*," by Mr. William H. Allen, is described as a new kind of book about government. It is a handbook on straight-seeing, straight-thinking and straight-acting on public questions between election times. It aims, says Mr. Allen, "not to settle but to raise questions, to encourage self-analysis and study of local conditions, and to stimulate interest in methods and next steps for getting done what we all agree should be done to make democracy efficient." In fact, it represents a very careful survey of all the minute details of government which have in the past been so woefully neglected.

Mr. Allen's chief error, it seems to me, lies in the title of the book and in the sub-heading, "Whether she votes or not." He does not indicate why the woman any more than the man should assume as her work the performance of unpleasant details which men have neglected in their conduct of government in the past. In short, Mr. Allen seeks to limit unjustifiably the sphere of woman. He insinuates that the minutiae of administrative work which are controlled and initiated by men will give sufficient scope for her energies. He says repeatedly "the ballot will not help child labor," "the ballot will not make budgets," "the ballot will not keep children in school," and concludes therefrom that woman can be an efficient citizen whether she votes or not. His error is caused, it seems to me, by his fundamental misconception of the nature of women. He needs to realize, as Dr. Patten says, that a woman is a distinct entity in herself, not a defective man.

NELLIE MARGUERITE SEEDS NEARING.

Ashley, R. L. *The American Federal State*. Pp. xlvii, 629. Price, \$2.00. New York: Macmillan Company, 1911.

This is a revised edition of a textbook in Civics, which was originally published in 1902, and which was reviewed in this journal shortly after its publication. The revision has taken the form mainly of correcting certain errors and of bringing statements of fact and statistical material down to date. Some of the valuable books on American government which have appeared since the original edition of this volume was issued are mentioned in a brief bibliography, but, with few exceptions, no new references have been inserted throughout the body of the book.

The only new material of any importance which is added is a chapter (XXIX) dealing with natural resources and the conservation movement. This treats of conservation in general, and then takes up in turn the national land policy, forests, water, waterways and minerals. Valuable as this material is, it is at least questionable whether an allotment of twenty pages to conservation and of only four pages to the tariff, three to trusts and three to the regulation of railways, gives a proper perspective of present-day conditions.

Along several lines have important changes taken place in American government during the past decade. Colonial governments and colonial policies have been established, and colonial problems have arisen. New devices in city government have also been put into operation. The author's treatment of both these topics remains most inadequate. A single page is given to colonial policy, colonial government and colonial problems combined. The Philippines and Porto Rico are disposed of in a paragraph of nine lines. Hawaii and the Panama Canal are only referred to incidentally, and the Canal Zone is not mentioned.

Similarly, in dealing with municipal affairs, government by commission is disposed of in a paragraph of twelve lines, under the topic "The Council: Organization," no attempt being made to tell what is meant by "commission government." The discussion of the initiative, referendum and recall is antiquated, and but little reference is made to important recent

social and economic legislation. The treatment of political parties makes no note of the important developments since 1900 in party groupings and policies.

While this is a valuable manual, especially for teachers who wish to combine a considerable amount of American History with their teaching of Civics, its treatment of present-day government and politics must be considerably supplemented by a well-informed teacher or by extensive collateral reading on the part of students.

RAYMOND GARFIELD GETTELL.

Trinity College.

Cameron, Agnes D. *The New North.* Pp. xv, 398. Price, \$3.00. New York: D. Appleton & Co.

One can now go by regular steamer to the Arctic Ocean via the Athabaska, Slave and Mackenzie Rivers. The first season that this was in operation, Miss Cameron, with one woman companion, took the journey. Her record of it is very scrappy and very interesting reading. The book is a fine piece of workmanship and well illustrated.

The author tells no end of anecdotes about the country and the people. Possibly she is a little optimistic. Certainly she is well impressed by the essential good qualities of the natives, and shows pictures of some of them that might well make Caucasian parents envious if complexion could be changed a bit. Miss Cameron's appreciation of the Arctic and Subarctic native hints at a need of reconstruction of our definition of savages. Here is one of her many tributes to the Esquimaux:

"The Eskimo realizes that the pleasure of life is in pursuit, not in acquisition. Where wants are many, joys are few; the very austerity of his life has made a man of him. Laying up few treasures for the elements to corrupt, accumulating no property except a little, a very little, of the kind designated by Wemmick as 'portable,' he, to better and saner effect than any man, decreases the denominator of his wants instead of increasing the numerator of his havings. Surrounded by the paleocrystic ice, the genial current of his soul has not been frozen by that ice. An Eskimo family accepts life with a smile and, in the faith of little children, goes on its way.

"An old Scot once prayed, 'O Lord send down Thy worshippin' people at this time the savin' grace o' continuance.' Only one man has less need to pray that prayer than the Scot himself, and that man is the Eskimo. The Indian eats and sleeps as his wife works, but while there is spearhead to fashion or net to mend, the clever hands of the Eskimo are never idle. Thrifty as a Scot, ingenious as a Yankee, every bit of the little property that he has is well kept. You find around this igloo no broken sled-runner, untrustworthy fishing gear, nor worn-out dog harness. Civilization has nothing to teach this man concerning clothing, house building or Arctic travel."

A smaller part of the book gives an account of the pushing white man's frontier in the wheat belt.

J. RUSSELL SMITH.

University of Pennsylvania.

Carver, Thomas N. *Principles of Rural Economics.* Pp. xx, 386. Price, \$1.30. Boston: Ginn & Co., 1911.

This book is an economic and literary treat. The author is professor of political economy in Harvard University and, as is well known, is perfectly capable of handling in a masterful manner any phase of the history and theory of political economy. There may be some question, however, at first sight as to the author's presumption in dealing with so difficult a subject as the whole range of rural economy and social life; but he disposes of this objection in his preface by showing that he grew up on a farm in the upper Mississippi Valley, later farmed independently on the Pacific coast, traveled extensively in this country and in Europe studying farming and farm life, and "has been for several years teaching the subject of rural economics to classes varying in size from seventy-five to a hundred students in Harvard University." The author must be regarded, therefore, as perfectly capable of handling his theme from the historical, theoretical and practical points of view.

The subject of rural economics is discussed under the following chapter: General principles, historical sketch of modern agriculture, the factors of agricultural production, management as a factor in agricultural production, the distribution of the agricultural income and, lastly, the problems of rural social life. Each chapter is discussed by divisions and by topics, so that, while it may be taken up and read by anyone interested in the rural problems of to-day, it may be used as a textbook in rural economy for which its preparation was undoubtedly primarily intended.

The book is by no means technical in nature, and, while it is plain that the author is familiar with the technique of agriculture, it is so simply and clearly expressed that the ordinary reader will have no difficulty in following the arguments. Nor is there anything one-sided about this volume. Both the advantages and disadvantages of country life are pointed out, but the importance of the agricultural industry to our national welfare is never lost to view. Hence, the author speaks with no uncertain sound as to the fads and fancies of much of our political and social life, and his shafts of witicism, satire and sound common sense irrigate an otherwise apparently dry subject and put new life into political economy. If every professor of political economy in the country would procure a copy of this book, thoroughly digest its contents, imbibe its spirit of optimism and incorporate its teachings into class-room work, never again would it be said that political economy is the "dismal science." It is possible that the reviewer's predilection for country life and surroundings makes him over-zealous in this regard, but he cannot help feeling that Professor Carver saw a great light, moved out of the valley of dry bones, and is bearing a common-sense, earnest message to his fellow-professors, to students and to thoughtful citizens regarding the great industry of agriculture and its importance to our future national life.

At the same time, there is one slight criticism which the reviewer would mention—namely, that the section on "agricultural education" (p. 115) could be improved by adding information regarding the farmers' institutes, com-

munity high schools and other newer features of agricultural extension work which are growing factors of educational rural life; and that the subject of co-operation (pp. 274, 278), in view of its economic importance, is worthy a little more space than it now receives.

A good bibliography and a fair index round out the contents of this little volume, which, in view of its subject matter, as well as its method of treatment, it is to be hoped will have a wide circulation among all classes of intelligent readers.

JAMES B. MORMAN.

Kensington, Md.

The Catholic Encyclopedia. Volumes ix, Pp. xv, 800; x Pp. xv, 800; xi Pp. xv, 799; xii Pp. xv, 800. Price, \$6.00 per vol. New York: Robert Appleton Company, 1911-12.

The rapidity with which this work is being brought out is shown by the appearance of four new volumes in the last sixteen months, leaving but three more to complete the fifteen volumes of the series. These recent publications, covering the subjects from *Laprade* to *Reuss*, fully maintain the high reputation of the earlier ones for scholarly treatment and the inclusion of a wide range of subjects. No description of the plan of the work is required at this late day, nor is there need of any general terms of praise in view of the universally favorable reception of the earlier portions by both American and European reviewers. A better idea of the scope and value of the recent volumes can be given by enumerating a few of the more important subjects treated therein.

Among the church institutions taken up are the *Mass*—its liturgy being treated by Dr. Fortescue, of Hertfordshire, England; its music by Dr. Henry, of Philadelphia, and the sacrifice of the Mass, its dogma, history and the practical questions concerning it, ably discussed by Prof. Pohle, of the University of Breslau; the article *Legate* is prepared by Dr. Cerretti, Auditor of the Apostolic Delegation at Washington, and *Nuncio* by Prof. Kirsch, of the University of Fribourg; general monastic institutions are treated under *Monasteries*, *double*, by G. C. Alston, of Downside Abbey; *Suppression of Monasteries*, by J. M. Besse, Director of the "Revue Mabillon," and Dr. Gasquet, Abbot President of the English Benedictines; *Monasticism in the West*, by G. R. Huddleston, *in the East*, by F. J. Bacchus and Dr. Fortescue; *Mendicant Friars*, by L. Oliger; *Nuns*, by Prof. Vermeersch, of Louvain; *Preachers* (Dominicans), by Dr. Mandonnet, Rector of the University of Fribourg; and *Military Orders*, by Prof. Moeller, of Louvain. *Propaganda* is an unusually instructive article by Mgr. Benigni, giving the history, organization and methods of procedure of this most important of the Roman Congregations; while under *Pope* the institution of the papacy is given full treatment by G. H. Joyce, of St. Asaph, Wales, though rather from a theological than a historical point of view.

Under legal institutions are to be found such topics as *Canon Law* by Prof. Boudinhon, of Paris; *Civil Law as Influenced by the Church*, by Dr.

Schaeffer; *Common Law and Capital Punishment*, by J. W. Willis; *International Law*, by W. G. Smith, of Philadelphia; *Roman Law and Pandects*, by Dr. J. I. Kelly, formerly Dean of the Faculty of Law in Louisiana State University; *Legacies*, by Prof. Van Hove, of Louvain; *Mortmain*, by C. W. Sloane.

Among the religious articles that on the *Reformation*, by Prof. Kirsch, of Fribourg, is especially noteworthy. His frank discussion of the causes of the movement bring him to much the same conclusions as those expressed by Mr. Lea in the Cambridge Modern History, though he deals with the subject in much less detail. His judgment as to the methods and results of the Protestant movement is naturally unfavorable, but the whole tone of the article gives a most favorable impression of fair-mindedness as well as of scholarship. It would not be easy to find elsewhere so able a treatment of the subject in the same space. Other religious articles of note are *Protestantism*, by Dr. Wilhelm; *Paganism*, by C. C. Martindale; *Occult Art*, by Prof. Arentzen; *Missions*, *Mormons*, *Mohammedanism*, *Modernism*.

Topics of general interest find a large place in these four volumes. As examples, may be cited the descriptions of various Indian tribes by Mr. Mooney, of the Bureau of American Ethnology; a history of Medicine by Dr. Sengfelder, of the University of Vienna, and of Physics by Prof. Duhem, of Bordeaux; a description of the various features of church architecture by Mr. Cram, of Boston; *Palæography*, by Prof. Bréhier; *Palæontology*, by Dr. Waagen, of Vienna; *Latin Language and Latin Literature in the Middle Ages*, by Prof. Degert, of Toulouse, Prof. Lejay, of Paris, and Father Sheid; Periodical Literature, a survey of Catholic current literature in the various countries of the world, giving lists of all the important publications and thus furnishing information it would be impossible to obtain in any other one place; with many other subjects, such as *Migrations*, *Masons*, *Music*, *Mosaics*, *Names*, *Numismatics*, *Church Property*, *Population Theories*, *Race*, *Renaissance*, etc.

The references and literature cited at the end of each article seem at times incomplete. An effort has been made to give references in English where possible, but in the excellent biography of Napoleon one misses, for instance, Fournier's *Life of Napoleon*, and in the article on Ordeals, Mr. Lea's *Superstition and Force*, while similar omissions may be found in the foreign bibliographies as in the absence of Luchaire's studies in connection with the fourth Lateran Council or Krusch's studies on St. Remigius. Occasionally, also, one is inclined to criticise the editor's choice of contributors for certain articles, as when the subject of Demoniacal Possession is given to a professor of moral theology instead of to a psychologist, or when the Philippine Islands is discussed by one who shows so evident an anti-American bias as Father Finegan, of Manila. Such criticisms are only occasionally called for, however, and the editors may well be proud of the work of reference they are producing.

A. C. HOWLAND.

University of Pennsylvania.

Crozier, John B. *Sociology Applied to Practical Politics*. Pp. xi, 320. Price, \$3.00. New York: Longmans, Green & Co., 1911.

This volume is a collection of eighteen miscellaneous essays and articles previously published in the "Fortnightly Review" and other English periodicals during the period of 1902 to 1911. They have been grouped by the author into three "Books" entitled, respectively, A Challenge to Socialism, Sociology and Politics, and Sociology and Political Economy. The collection is presented as an illustration of the application to practical politics of the principles developed by the author in his previous writings and is, therefore, the completion of a definite scheme. The first volume in this logical series is his *Civilization and Progress*, in which the "First Principles of Sociology," with their Laws and Dependencies, are developed. The second is the *History of Intellectual Development*, Volume III, where he exhibits "the practical use to which such First Principles might be put if they were applied to practical Politics." The present volume goes further. It endeavors to show that "if sociology is fully to justify itself as a science whose principles cannot be neglected with impunity by practical statesmen, it ought to render some assistance to the solution of the practical, social and economic problems of the passing day as well."

Two somewhat unfortunate characteristics mar the present volume and distinguish it from the preceding works. In the first place it is fragmentary and without any consistent program. It treats detached and miscellaneous topics. This is an inevitable defect of a collection of articles running through a series of years. In the second place the majority of the articles are of a controversial and polemic character rather than positive and inductive studies. Both of these criticisms are explained in the following sentence from the author's introduction, though it is questionable whether they justify the method. He says: "Accordingly, when questions like those of Socialism, Tariff Reform, Imperial Preference, the Mixing of Races, Race Degeneration, etc., chanced to come to the front, I seized the opportunity to get a hearing, in one or the other of our Reviews, for the treatment of them from the side of Sociology." It is the method pursued which leads to extravagance of statement as when he charges Marx with deception and deceit (though unintentional), pp. 12 and 13, or fails to regard him as a serious (even if mistaken) economist, p. 63, and to discuss the work of Kidd, Durkheim, Buckle, Comte and even Spencer who he says has done nothing whatever toward establishing a Science of Sociology (p. 117) "as mere lyrics," to use the words which he employs to describe Mr. Kidd's attitude toward these great writers, p. 80.

In the constructive elements, which appear amid much negative and controversial material, the book is strong and vigorous and thought-provoking. The restatement of his sociological program (p. 118) will be found to be stimulating and sufficiently comprehensive to merit the approval of most American Sociologists, none of whom is so much as mentioned in the volume.

J. P. LICHTENBERGER.

University of Pennsylvania.

Du Bois, W. E. B., and Dill, A. G. (Ed.). *The College-bred Negro American.* Pp. 104. Price, \$0.75. Atlanta, Ga.: Atlanta University Press.

This is a companion to a study of the same subject in 1900, and is another of this valuable series on the Negro. The Negro college, the Negro and the white colleges of the North and the Negro graduate are well presented.

About thirty-two colored institutions do college work; thirteen of these are "leading colleges according to Carnegie Foundation units" and to the number of students. Almost all do some high school or "College preparatory" work. But this is explained as absolutely necessary since the South has been tardy in providing high schools for Negro children.

Many of the Northern colleges welcome Negro students; some do not. The special reports on the thirty-four Negro graduates of Iowa colleges and on the sixty graduates and 200 matriculates since 1870 of the University of Kansas are favorable.

Ascertained records show that 3,856 persons of Negro descent have been graduated from American colleges; the first one in 1823, but all save twenty-eight since 1860. Of these, 2,964 were from Negro colleges and 693 from non-Negro colleges. Estimates of Negro graduates of white colleges that keep no record of race or nationality bring the total to about 5,000.

Statistics compiled from replies of 802 living graduates show that the large majority of the Southern born have remained South to labor among their people and many Northern born Negro graduates have come South for the same purpose. Conjugal condition of graduates and the large average number of living children portray their leadership in needed home making.

Both occupations and avocations furnish evidence that they are "usefully employed" . . . "largely in the work of leadership." Of the total, 53.8 per cent were teaching; 20 per cent were preaching; 7 per cent were practicing medicine, and 3.8 per cent, the law. These professional men have been and are "of great importance in the educational, social and economic uplift of the Negro race in America." Their avocations included activities in learned societies, in publication, in public offices, in charitable work, etc.

The study concludes that, although "hampered by prejudice and its accompanying discriminations as well as by lack of opportunity," these graduates of less than fifty years are hopeful of the future of the Negro race in America; they show remarkable results for the Negro college; the demand for them in many fields is greater than the supply, and that the college-bred Negro is of especial significance to the Negro and the nation.

GEORGE EDMUND HAYNES.

Fisk University, Nashville, Tenn.

Harris, G. M. *Problems of Local Government.* Pp. 483. Price, 10/6. London: P. S. King & Son, 1911.

Mr. Harris, who is Secretary to the County Councils' Association of England and Wales, has undertaken in this volume to give some idea of the papers and discussions at the first International Congress on the Administrative Sciences, held at Brussels, in July, 1910. The first part, comprising about

one-third of the book, is a survey of the papers and proceedings of the Congress, giving a comparative analysis of the machinery and functions of local government in the principal countries. This survey is necessarily condensed; and limited, as it is, to the papers presented at the Congress, there are some important omissions. Thus, as Mr. Harris notes, there is no adequate account of institutions in Germany and Russia; and only one paper—on county government—dealing with local government in the United States. The other European countries and Brazil are well represented; and the survey adds much to the information available about local government in these countries, for many of which there had hitherto been no accessible accounts in English.

Among the many topics discussed special mention may be made of town planning, industrial undertakings, relations between the local authorities and the central government, preparation for and advancement in the public service, the protection of the private individuals, and documentation. One of the most striking features is the sympathetic discussion of the French system of administrative courts by an English writer. Mr. Harris, indeed, feels that the administrative departments of the central government in England are becoming in large measure free from judicial control.

The second, and larger, part of the volume contains in full the twenty-one papers presented to the Congress on Local Government in England, Wales and Scotland, and also three papers on the central departments of Agriculture in Great Britain, Holland and the United States. The various papers on local institutions contain considerable duplication; but together throw a good deal of light on the present day problems of local government in Great Britain. Three of the papers are by Sir H. George Fordham, Chairman of the Cambridgeshire County Council, and among the other contributors may be noted Edward Jenks and Sidney Webb.

An appendix contains an alphabetical list of the foreign authors of papers with the titles of their papers, which have been published in full, in various languages, in the official proceedings of the Congress.

JOHN A. FAIRLIE,

University of Illinois.

Hobhouse, L. T. *Liberalism*. Pp. 254. Price, 75 cents. New York: Henry Holt & Co., 1911.

The first chapter of this suggestive volume tersely discusses the authoritarian government that preceded the modern state. In the religious, political, economic and social revolt against that kind of government, the author finds the historical beginnings of Liberalism. The main points at which Liberalism assailed the old order are stated in such historic terms as civil liberty, taxation without representation, freedom from domination of class or property, and equality of women. Having thus stated the historical elements in the evolution of Liberalism, the author proceeds to discuss the movement in theory, averring that "Great changes are not caused by ideas alone; but they are not effected without ideas."

From the theory of the natural order, the author moves on through Bent-

ham's Greatest Happiness principle to the theory of laissez-faire, making a significant distinction between social and unsocial freedom, through the modifications made by Gladstone and Mill, to the heart of Liberalism. "The heart of Liberalism is the understanding that progress is not a matter of mechanical contrivance, but of the liberation of living spiritual energy." In stating the relation between the state and the individual, the author makes clear that the conscience of the community has its rights as much as the conscience of the individual, and that the "right to work" and the right to a "living wage" are just as valid as the rights of person or property. He clearly distinguishes between Liberalism and Socialism, averring that economic Liberalism "seeks to do justice to the social and individual factors in industry alike, as opposed to an abstract Socialism which emphasizes the one side and an abstract Individualism which leans its whole weight on the other." Democracy is the development of social interest and the problem of all government is to bring home to each individual a sense of social responsibility.

The book closes with an inclusive and illuminating discussion of the present and future problems of Liberalism, such as pensions to wage-earners, the relations between the two houses of Parliament, relations between the state and land, and relations between the state and the wage-earner.

Professor Hobhouse is not constructing Utopias. His science is founded on the much sounder basis of social and political experience. Viewed either as a work on practical social and political problems, or as a work on political and social theory, the book is a most valuable contribution. The author has balanced his theories with social and political experience and has keenly analyzed social and political experience for their deeper meanings.

CLYDE L. KING.

University of Pennsylvania.

Hughan, J. W. *American Socialism of the Present Day.* Pp. x, 265. Price, \$1.25. New York: John Lane Company, 1911.

All fair-minded students of American social problems will welcome this sympathetic yet critical, detailed yet well balanced, study of a movement now commanding considerable popular attention. The book is the result of a successful endeavor to give a picture of present-day American Socialism, with special reference to the principal Socialist body in the United States, the Socialist Party. The writer takes up in turn the relations of the Marxian doctrine to the American movement, the modern conceptions of the Socialist commonwealth, and the immediate demands of the Socialist Party, illustrating each from quotations from American leaders and platforms. The method of treatment is such as acquaints the reader with not only the spirit of the movement but its personnel as well. No small part of the value and interest of the book lies in its discussion of the problems of socialism facing those within its ranks, such for example, as the questions of the attitude of Socialism toward the organization of a labor party in America analogous to that existing in England, its relation to the unions, both industrial and craft, and its attitude toward the middle class independent farmer.

The main conclusions of the author are tersely summarized in the following quotations:

"The inquiry has shown a movement whose doctrine is professedly Marxian and at most points actually so. The explanation of crises by a special overproduction theory has been largely superseded, the expectation of catastrophe materially modified, and the existence of surplus value based more and more upon induction from the facts of industry than upon the Marxian labor theory. The economic interpretation of history, however, and preeminently the class struggle doctrine, constitute the foundation of Socialist teaching in the United States." . . . "The tendency of original Marxian thought in America, in any case, is distinctly away from the discussion of theory, Revisionist or the contrary. Socialism, like religion, shares at present the trend of investigation and education toward the concrete and the utilitarian, rather than to the abstract, and the United States has entered upon Socialist activity at a state when the issue is too vital to give free play to the spirit of pure philosophy."

As a political party, American Socialism is pictured as possessing a definite organization characterized by "discipline, extreme democracy, and internationalism." With the exception of the non-affiliated opportunists, and the Socialist Labor Party, the party is a united body, though there are important internal differences in policy, shading from the constructionists on the right to the revolutionists on the left. In such important points as allegiance to the Marxian philosophy in general, acceptance of the discipline of the Socialist Party, and assent, with the exception of certain immediate demands to the national platform, the Socialists of the United States are in mutual accord.

The study fills a long felt need in bringing together in small compass up-to-date, impartial information about a movement which has ceased being of interest to the Socialist alone.

FRANK D. WATSON.

New York School of Philanthropy.

Huntington, E. *Palestine and its Transformation.* Pp. xvii, 443. Price, \$2.00. Boston: Houghton, Mifflin Company, 1911.

The main theme of this book is the relation of the land surface and the climate of Palestine to the people, at different times in the history of the region. While the character of the land surface has been changed but little since earliest historic times, the author believes that the climate has changed greatly. Progressive dessication has made Palestine of the present quite unlike Palestine of the ancient world. This is the transformation.

In elaborating this idea of climatic change, the author describes the geographic features of the different natural divisions of Palestine, as they were in ancient times and as they are now. In so doing sharp contrasts are drawn between such sections as the land of the Phœnicians and the land of the Jews, Judea and the land of the Moabites, Samaria and Galilee. The intimate relation of the character of the country to the life of the people is demonstrated beyond doubt; thus the seclusion of Judea, sheltering its

people among the low hills of the plateau, produced a type of people entirely different from those in the open, low plains of Sharon and along the Phœnician coast. The positive character of the Jew and the lack of positive characteristics among the Philistines are ascribed to these differences of surroundings.

Following the chapters which discuss the effect of the country on the people of Biblical days, the author devotes several concluding chapters to evidences of permanent changes of the climate, in respect to amount of rainfall. The climate of ancient Palestine is described, and evidences that it has changed are found in fluctuations of the level of the Dead Sea; in the ruins of ancient towns where water does not now exist; in the signs of former extensive cultivation, where naked rock now forms much of the surface. Some of these things, as the naked rock, where vineyards and olive groves once stood, have been ascribed to unwise deforestation. But the author is not inclined to accept that view. A change from moist conditions to aridity has been, he believes, a more potent factor. Reading the book certainly inclines one to accept the author's interpretation, so vividly and so convincingly are the transformations pictured.

Not every reader will be willing to go as far as the author does in accounting for human conditions and traits on the physical basis. Some question may be raised about the reliability of traditional accounts of Palestine, for use as scientific evidence. Objection may be made to some interpolated explanations, as the effect of mountains on rainfall (p. 86), and the rather profitless comparison of Palestine and California. But no one can deny that the book is charmingly written outside these parts, and that it makes most real the setting of many Biblical stories, formerly only half appreciated.

As an example of geographic investigation, thoroughly done and well written, few recent books contain so much of human interest.

WALTER S. TOWER.

University of Chicago.

Hutchinson, Woods. *We and Our Children*. Pp. x, 371. Price, \$1.20. New York: Doubleday, Page & Co., 1911.

Of the great variety of readers interested in any serious discussion of children, some will approve of "*We and Our Children*," because it is modern, biological and essentially iconoclastic; others will admire the breezy, hearty way in which the author disposes of some of the "problems" which worry over-serious minds; still others will like the book for the many opportunities it offers them to differ with the writer. All will be interested because it is suggestive, stimulating and entertaining. Biological facts are used in a familiar, if not always exact way, the evolution of man in whole and in parts is assumed, and the outlook is forward to the stronger and better race. The book is really a popular discussion of eugenics.

Each page has a challenge, an attack, or an annihilation of some cherished tradition. "Piecing between meals," a custom no grown-up ever approves, in children, is endorsed. "A child's stomach must be stretched at

intervals, if it is to grow properly." Fortunately the youngsters are not likely to read the book. The American birth rate is satisfactory, although it has decreased from over five to three and a half in the past forty years. Better care and understanding of children have given us and other leading nations an accompanying increase in population. Dr. Hutchinson asserts that the American baby of to-day is the superior to any other baby in weight, length, and vitality, and this advantage is retained by the American school child.

The modern mother, particularly the American mother, is not a traitor to her family and her race, as is so often charged by eugenic alarmists. Judged by the "real and supreme test of any civilization the production of strong children," the modern mother is the best the world has ever produced, all of which is very gratifying to national pride; the disregard of controverting facts should be charged to emphasis or enthusiasm.

The idea introduced in the discussions of eyes and ears, that these necessary organs wear out before we are ready to dispense with them because they are designed by nature for only forty or fifty years' use and hygiene and sanitation have prolonged the average age to seventy, is not likely to find approval in the face of present knowledge. Nor again, when it is stated that an examination of the skulls of mound builders and American Indian tribes has shown that every known disease and deformity of the teeth which exists to-day existed hundreds of years ago, and that our teeth are as good as those of any race at any time. Current dental knowledge does not bear out the claim. One of the leading dentists of the country, also a scientist, says: "Such sweeping statements are unfair. It has been my good fortune to examine the skulls of different early peoples, here and abroad. While it is possible to occasionally find a decayed tooth and a deformity in the dental arch, they are not of the character observed in modern civilization—due to arrest of development of face and jaws."

Written for those who realize what a difficult job it is "to be a daddy," it would be a very ignorant or an extremely wise parent who could not profit by its reading.

A. H. YODER.

New York School of Philanthropy.

Johnson, Amandus. *The Swedish Settlements on the Delaware: Their History and Relation to the Indians, Dutch and English, 1638-1664.* Two volumes. Pp. xxxii, 897. Price, \$6.00. New York: D. Appleton & Co., 1911.

Two points are especially noteworthy on examination of Dr. Johnson's work; its documentation and the close mastery of detail. In order to elicit in full the truth and to write an exhaustive history of his subject he has spared no pains and has left no stone unturned in his keen search for material. It is safe to say that few investigators have come to the writing of a subject with such thoroughness of preparation, and that few works are based upon a surer foundation of authoritative documentary evidence. Dr. Johnson tells us in his preface that he made "three trips to Sweden, two to Holland and England, and one to Finland, in search of documents and

materials," and further, that he "has examined and read every document on the subject known to exist." His researches ranged from the material in the various archives at Stockholm, where he gathered the bulk of his material, to the University Library at Lund, the University Library and the Archives of the Consistory at Upsala, the Royal Archives at the Hague, and other depositories; thence across the channel to the British Museum and Public Record Office at London, and the Bodleian at Oxford. Neither has he neglected the material close at hand, in the Library of Congress, the Libraries of the Historical Societies of Pennsylvania and New York, and in other places. He has also familiarized himself with the source material in print and with the authoritative secondary writers on his subject. Approximately twenty-three hundred foot-notes, some of considerable length, bear ample witness to the thoroughness of his searches and the patience of his labor.

The history of a few Swedish settlements, which never numbered over a few hundred colonists and whose existence as a distinct Swedish colony lasted only a quarter of a century, is set forth carefully and with great elaboration of detail in nearly nine hundred pages of royal octavo size. One is inclined to wonder with the author whether so slender a colony in point of time and numbers deserves so much space and fullness of detail. But the work as it stands is justified. It has a distinctly local interest, setting forth carefully the manners and morals of the Swedish settlers, their political and social characteristics, and has a value from a genealogical point of view. But it has a wider interest. The book elucidates in a clear manner the relations of the Swedes with their neighbors in America, such as the Indians, the Dutch in New Netherlands and on the Delaware, the English in Virginia and Maryland and from far off New England. These relations also assume an international importance, bringing the Dutch, English and Swedes into conflict for commercial and territorial dominion in America. Neither has Dr. Johnson made the mistake, which so many of our writers on the colonies have made, of forgetting that the relation between the colony and mother country was intimate. The author devotes ninety pages, based largely upon original investigation, setting forth in an able manner the political, social and economic conditions in Sweden during the period preceding and during the colonizing movement, in order to elucidate the conditions under which colonization took place, the motives which actuated the project in America, and the methods under which the settlements were made. Such an account is of general value because of the light it throws on the European backgrounds of empire building in America. A few words as to organization of his material will throw some light on the treatment of his theme.

The work is divided into five books. Book I is devoted to a Swedish background of colonization during the period 1607-1660. Each of the following books is subdivided into two parts, one dealing with colonizing activities in the home country during a natural period, and the other with the activities of the colonists during the same time. This method of treatment not alone avoids confusion, but it has the added merit of making clear the interrelation and interaction of the colony and mother country, matters of great importance in the history of colonial policies.

The appendixes, covering some ninety pages, include brief biographies of the important persons connected with the colony, such as Papegoja, Printz, Ridder, Rising among the colonial officials, Oxenstierna, Brahe, Fleming and Spring among the Swedish statesmen; a list of the officers, soldiers, sailors, servants and settlers in the colony; documents and translation of documents, being largely instructions to the colonial officials, and a list of the preparations of the various expeditions to New Sweden. The work contains numerous illustrations, reproductions of MSS., pictures of the principal actors, and cuts of the houses, utensils, etc., of the settlers. There are six excellent maps, two of which, drawn by Dr. Johnson, are valuable as showing the territory and settlements of the Swedes.

The bibliography is exceptionally good, serving as a guide to the material, manuscript, printed collections of sources, and secondary works. The index is complete and the make-up of the book is splendid.

The work is a distinct contribution to our knowledge, and Dr. Johnson is to be congratulated on the excellence of his work.

W. T. Root.

University of Wisconsin.

King, F. H. *Farmers of Forty Centuries.* Pp. ix, 441. Price, \$2.50. Madison, Wis.: Mrs. F. H. King, 1911.

The appreciators of things economic are but few, and those who appreciate and know agriculture are yet fewer. It is, therefore, a matter of congratulation that a scientific agriculturist has at last gone to the Orient and come back to tell and explain what he saw of Oriental agriculture along the Pacific littoral in a five-months' trip. Professor King has left us a valuable book and it is to be regretted that he did not have time to extend his studies to the interior parts of the Mongolian lands.

In the preface Liberty H. Bailey says: "For the most part, authorship of agricultural travel is yet undeveloped. The spirit of scientific inquiry must now be taken into this field, and all earth-conquest must be compared and the results be given to the people that work. Such is Professor King's book.

"It is the writing of a well-trained observer who went forth not to find diversion or to depict scenery and common wonders, but to study the actual conditions of life of agricultural peoples. We in North America are wont to think that we may instruct all the world in agriculture, because our agricultural wealth is great and our exports to less favored peoples have been heavy; but this wealth is great because our soil is fertile and new, and in large acreage for every person. We have really only begun to farm well. The first condition of farming is to maintain fertility. This condition the Oriental peoples have met, and they have solved it in their way. We may never adopt particular methods, but we can profit vastly by their experience. With the increase of personal wants in recent time, the newer countries may never reach such density of population as have Japan and China; but we must nevertheless learn the first lesson in the conservation of natural resources, which are the resources of the land. This is the message that Professor King brought home from the East."

One of the most conspicuous things about the agriculture of the United States is the widespread fact that the industry is not adjusted to the resources of the locality in which it is prosecuted. Here is a contrast pointed out by Professor King.

"To anyone who studies the agricultural methods of the Far East in the field it is evident that these people, centuries ago, came to appreciate the value of water in crop production as no other nations have. They have adapted conditions to crops and crops to conditions until with rice they have a cereal which permits the most intense fertilization and at the same time the ensuring of maximum yields against both drought and flood. With the practice of western nations in all humid climates, no matter how completely and highly we fertilize, in more years than not yields are reduced by a deficiency or an excess of water.

"It is difficult to convey, by word or map, an adequate conception of the magnitude of the systems of canalization which contribute primarily to rice culture. A conservative estimate would place the miles of canals in China at fully 200,000, and there are probably more miles of canal in China, Korea and Japan than there are miles of railroad in the United States. China alone has as many acres in rice each year as the United States has in wheat and her annual product is more than double and probably threefold our annual wheat crop, and yet the whole of the rice area produces at least one and sometimes two other crops each year."

How does the Chinaman live and make a living, and how does he conserve the fertility of the soil? These questions Professor King answers with a wealth of economic observations that make his book one that should be read by all those who wish to understand the economic side of affairs oriental.

There is much in China for us to learn. So much that Dr. King thinks that "One very appropriate and immensely helpful means for attacking this problem, and which should prove mutually helpful to citizen and state, would be for the higher educational institutions of all nations, instead of exchanging courtesies through their baseball teams, to send select bodies of their best students under competent leadership and by international agreement, both east and west, organizing therefrom investigating bodies each containing components of the eastern and western civilization and whose purpose it should be to study specifically set problems. Such a movement well conceived and directed, manned by the most capable young men, should create an international acquaintance and spread broadcast a body of important knowledge which would develop as the young men mature and contribute immensely toward world peace and world progress."

J. RUSSELL SMITH,

University of Pennsylvania.

Lavisse, Ernest. *Histoire de France depuis les Origines jusqu'à la Révolution*, Tome Neuvième I. La Règne de Louis XVI par H. Carré. Pp. 441. Paris: Hachette et Cie.

This volume of M. Lavisse's well-known history of France is the work of three historians, but by far the largest part of the book is by M. Carré.

He contributes the divisions on Louis XVI and his efforts for reform, on his foreign policy, on the social life of the reign, and the three chapters on what he calls the "Agony of the Ancient Régime." M. Sagnac writes only the chapter on the "Eve of the States General, December, 1788, to May, 1789," while M. Lavissee supplies the chapters dealing with the "Conclusions sur les Règnes de Louis XV et de Louis XVI."

As a rule, the division of labor in this work has not resulted in quite so conspicuous a lack of harmony as in this instance. The remarkable degree of unity in the other volumes in spite of the fact that they are frequently the product of co-operation has been a matter of favorable comment. In this instance, however, one cannot refrain from expressing the wish that M. Carré, whose treatment of the economic aspects of the Old Régime is so excellent, had also been asked to do the concluding chapters. The probabilities are that the more deep-seated social and economic evils of the Ancient Régime would have received recognition as causes of the revolutionary development somewhat more in accord with their real significance. Too much attention is given to the purely personal by M. Lavissee. The evils from which France was suffering, were according to him, due mainly to the inefficiency of the King. "La cause principale de la ruine de la royauté, ce fut le manque du roi," and from this came "l'inachèvement du royaume," and "la diminution de la puissance française." "La Crise" so clearly and tellingly treated in the last chapter is brought on by the King himself. Had Louis XIV and his successors played their part well instead of badly, there would still be a throne in France.

Whether this be so or not does not concern us here, but what is of importance is that in the conclusion of the volume we see altogether too little evidence of the play of factors which the earlier parts of the book prepared us to expect. Economic and social conditions, not to speak of the great intellectual movements of the Ancient Régime, dominate the course of events as M. Carré presents it, and should dominate them in the summing up also, quite regardless of the fact that the King and his court chose to live their artificial life at Versailles separated from the real life of the nation.

But this is only a general objection to a volume which is unusually meritorious and a fitting conclusion to the great work as a whole.

At the time of this writing the index volume has appeared and we now have a history of France which in point of scholarship as well as attractiveness in literary style belongs among the foremost works of its kind in any country. Indeed it would be a real contribution to the pleasure and profit of the large body of English readers to publish a translation at an early date. Similarly it is to be hoped that M. Lavissee and his collaborators will carry the work on through the Revolution and the Nineteenth Century. In M. Aulard's "Histoire Politique de la Révolution Française," we have the political development of the earlier period adequately treated by a great scholar, but the social and economic phases of the Revolution are not dealt with in his volume. For the history of the last century in France, no treatment of the breadth and scholarship of the work before us exists.

WILLIAM E. LINGELBACH.

University of Pennsylvania.

Monroe, Paul. (Ed.). *Cyclopedia of Education*. Vol. II. Pp. xi, 726. Price, \$5.00. New York: Macmillan Company, 1911.

The present volume illustrates the difference between the philosopher who has thought out the relations of his subject to education, and the philosopher who has not. In a seventeen-column article on "Ethics and Education," Professor Woodbridge, of Columbia, has written a sketch of the development of Ethics. There is little in the article to warrant the words "and education." They should have been omitted. True, there is a gentle bias towards education, and the word is twice used with respect in the body of the essay, once in the case of the Sophists, the other in connection with Plato's *Republic*. Near the close, the author mentions some ethical bearings on education that it would have been well to show, but which have been left to the reader's inference. With the slight exceptions mentioned, any sketch of the history of Ethics would have done as well. Thus, in this work one of the most important aspects of education remains a blank. Far different is the case with what John Dewey of the same university has written in this volume. Nothing is touched that is not made to illuminate the field of education upon which it impinges. Had this educational philosopher written the article on Ethics, we should have had an ethical chart for sailing on all seas. For example, in a few lines, he asks, what are the ends of education? Do they lie within or without the subject? Reflection shows that things which might be ends for education find their own ends in education quite as much. In the discussion on "Freedom of Will," Dewey shows that education has these three functions to perform: (1) To keep plasticity of mind alive—"Even a good habit must be flexible;" (2) To confirm preferences—"Nothing is more fatal than indifference;" (3) To make preferences reasonable. Other articles by Dewey are: Environment and Organism, Effort, Education, Democracy and Education, Definition, Deduction, Culture-Epoch, Theory, Course of Study, Control, Comparison, etc., etc. That this *Cyclopedia* is indispensable to the progressive teacher is due to this scholarly application of the fundamental sciences to the problems of education as illustrated in the contributions of Dr. Dewey and the great majority of his colleagues.

Among the contributors are found the names of Angell, Compayré, Goddard, Hibben, Jastrow, Jenks, Judd, Lodge, Pillsbury, Sadler, Sargent, D. E. Smith, Suzzallo, Turner. These are random selections from the one hundred nineteen contributors to this volume.

Nobody has tried to interpret education as a whole from the economic standpoint.

CHARLES DEGARMO.

Cornell University.

Perkins, J. B. *France in the American Revolution*. Pp. xix, 544. Price \$2.00. Boston: Houghton, Mifflin Company, 1911.

When Mr. Perkins died in 1910 this book had been nearly completed. The work of final revision and preparation for the press was done by Mrs. Perkins, with the help of Dr. J. Franklin Jameson of the Carnegie Institu-

tion, Prof. C. H. Van Tyne of the University of Michigan. A fitting introduction to the volume is given by the French ambassador at Washington, M. Jusserand. Mr. Perkins seems not to have made a study of original archives but to have based his work upon biographies, letters, and the published collections of original materials. The book is scholarly and interesting. As in his larger works Mr. Perkins here shows a mastery of dramatic arrangement, of clear perspective and of keen characterization that cannot be too highly commended. As far as possible in the scope of the volume, the actors tell their own story in apt quotations.

The weakness of our situation at the beginning and throughout the Revolution is shown, resulting as it did from lack of centralization, from economic mistakes, and from a patriotism largely embryonic. "Prosperity not only brings happiness but it develops virtues,"—patriotism among others. Surely the unfaltering courage of Washington must have yielded ultimately to British stupidity of those long years had not French arms, money, soldiers and ships come to our aid as they did. The story of American missions to France is well told; blundering but well-meaning Silas Deane, troublemaking Izard and Lee, pugnacious Lawrence, Jay and Adams, and the suave, politic Franklin who must truly have possessed the philosopher's stone, so successfully did he inveigle money from impoverished French coffers. "Hortalez & Co." furnish an interesting chapter, though an uncomfortable one to an American conscience. We have all been taught that France fought England because of the opportunity to pay off old scores, but we need to be reminded of the enthusiasm of the French masses for liberal ideas that influenced even a monarch like Louis XVI to champion a republican cause. Vergennes, as his foreign secretary, promised to make no peace with England till we were free, and the promise was kept faithfully. There is a charming picture of the young Lafayette—ambitious—but brave, generous and lovable. Of our other French friends it is sad to find how many of the young aristocrats who fought for us died on the scaffold as victims of the French Revolution; while most of those who gave us financial aid died impoverished. The French monarchy itself perished bankrupt a few years later after having spent 772 millions on a war from which it had gained very little. The French alliance with America was, according to Florida Blanca, prime minister of Spain, worthy of Don Quixote. "But the instincts of the French nation were right; they assisted a people to gain their freedom; they took part in one of the great crises of modern progress, they helped the world in its onward march. For nations, as for individuals, that is the greatest work."

WM. E. LINGELBACH.

University of Pennsylvania.

Plunkett, H. *Rural Life Problem in America.* Pp. xi, 174. Price, \$1.25. New York: Macmillan Company.

Just before we get to the end of our epoch of giving away free farms, we discover that we have a rural problem. It is fortunate that we can have a Rural Problem Doctor come and prescribe for us. Speaking from successful experience, Sir Horace Plunkett has been able to give us a valuable little

book worthy of wide reading by those interested in rural economics or sociology. It is suggestive, and most emphatic in its kernel idea of the need of organization.

"Twenty years ago the pioneers of our rural life movement found it necessary to concentrate their efforts upon the reorganization of the farmer's business . . . Our message to Irish farmers was that they must imitate the methods of their Continental competitors, who were defeating them in their own markets simply by superior organization. After five years of individual propagandism, the Irish Agricultural Organization Society was formed in 1894 to meet the demand for instruction as to the formation and the working of co-operative societies, a demand to which it was beyond the means of the few pioneers to respond.

"Speaking from administrative experience at home, and from a good deal of interested observation in America, I am firmly convinced that the new rural education is badly handicapped by the lack of organized bodies of farmers to act as channels for the new knowledge now made available. . . . The truth is, American farmers have had the will to organize, but they have missed the way.

"The political influence of the farming community has for this reason never been commensurate either with the numerical strength of its members or the magnitude of their share in the nation's work. . . . And not only political impotence, but political inertia, result from the lack of organization."

But he thinks organization is far more important than mere political leadership and crop making. "The thousands of young men who are now being trained for advanced farming too often have to restrict the practical application of their theoretic knowledge to the home circle, which is not always responsive, for a man is not usually a prophet in his own family. It is here that the educational value of co-operative societies comes in; they act as agencies through which scientific teaching may become actual practice, not in the uncertain future, but in the living present. A co-operative association has a quality which should commend it to the social reformer—the power of evoking character; it brings to the front a new type of local leader, not the best talker, but the man whose knowledge enables him to make some solid contribution to the welfare of the community."

J. RUSSELL SMITH.

University of Pennsylvania.

Richard, E. *History of German Civilization.* Pp. x, 545. Price, \$2.00. New York: Macmillan Company, 1911.

The field of German political history is rather barren in English. When we have mentioned Atkinson, Henderson, Bryce, Tuttle, Longman and Gardiner (omitting the translations) the list is almost complete (John Savage's *Complete History of Germany* has been out of date for two centuries and Sime hardly deserves a mention).

Histories on German Civilization are even less in number. We have indeed Franke's *Glimpses of Modern German Civilization* and the same

author's splendid book, *Social Forces in German Literature*, but the latter work is an attempt to "give a coherent account of the great intellectual movements of German life as expressed in literature" and to "trace the history of the German people in the works of its thinkers and poets," and a history of German Civilization proper has been wanting up to this time. The appearance of a book in English on this subject is, therefore, an event of some import and will be a matter of considerable interest to thousands in England and America, "to whom [speaking with Gardiner], from youth or from circumstances of education, German literature is a sealed book."

Dr. Richard attempts to give a general survey of German civilization from the earliest times down to our present day—in fact, he begins with the original "Scandinavian home of the Germans." That so vast a subject can not be treated in anything but a sketchy manner in some 500 pages is evident, and the specialist will not expect to find anything new in such a work unless it came from the hand of a Buckle or a Taine. Dr. Richards' treatise is naturally based on German accounts. It is not a brilliant paraphrase of these sources, but it is written in a clear, readable style (with little grace or elegance, however) and the laymen will find it well worth the reading.

The author has not always properly digested his sources nor is he always accurate, especially in his generalizations. He says, for instance: "Even if the runes are, as some bold writers claim, of Germanic origin and rather the source than the outcome of Mediterranean alphabets, there is no evidence that they were ever used for other than ceremonial and oracular purposes, or as dedicatory inscriptions on some weapon, ornament, or monument" (p. 30). The bold writers referred to belong to a forgotten age and the statement about the use of the runes is based on insufficient evidence (even though some German authorities may be found supporting this view). Runes were at one time extensively used. In the Egill Skallagrímsson's saga we find that the daughter of Egill is prepared to inscribe a song on wooden tablets; the *Rök-stone* contains part of a heroic poem; an old calendar, the *Skaane-law*, etc., are preserved in *runic* MSS.; Olaus Magnus (1490-1558) states that *runic* MSS. were preserved in Skara and other places.

He compares the wandering singers of the middle ages to "the literary Bohemians of to-day" (1); he ascribes to Heine the honor of introducing "the romantic grandeur of the ocean . . . into literature" (what shall we then do with the English, the Dutch and other poets who wrote about this grandeur long before Heine was born?) He repeats the antiquated theories of Scherer (though not so stated) about Germanic accent (the Germanic tribes were by no means the only ones to show "a tendency to revert [the accent] towards the beginning of the word." This was characteristic of the old Italic and the Keltic and it is the case in Finnish which accents the first syllable of every word); he states that *Ziu* (*Tyr*) "corresponded to Zeus or Jupiter" (p. 69), although he has the correct view on a following page (namely that "*Ziu* was . . . identified with Mars"); he affirms that Tacitus mentions the fact "that they [the Germans] had no images of their

gods," although Tacitus distinctly says in his history that the Germans carried "*signa deorum*" and "*effigies et signa*" into battle (in the Germanic Tacitus indeed says that a certain tribe, the *Naharvali*, had no images) and from the account of Adam of Bremen we are certain that the Scandinavians had images of their gods; a sentence like this occurs on p. 40: "In the time of the Germans we must suppose that the majority of the Romans were armed with wooden spears, the points of which were hardened by charring"!

The spelling of proper names is not always consistent and might confuse the layman. Thus we find the forms *Köln* and *Cologne*, *Pytheas* of *Marseilles* and of *Massilia*; *Gothland* appears as *Götland*, *Viaby* as *Wibby*; *Woden* (A. S. *Wodan*, O. E. *Woden*) is spelled *Woten*; the Icelandic *Holmganga* is written *holmgang* and *holmr* as *holm*, etc.

The above examples are taken at random from the first few chapters and tend to show the general weaknesses of the work—space does not permit the giving of a complete list of corrections.

We should like to see more of the private life of the Germans in the various periods, more about their manner of dress, their feasts, their medicine and doctors, their baths, their servants, the chase, etc. This might have swelled the book somewhat, but certain parts could be abridged (though this is a matter of taste) and the work is not entirely free from repetitions. Unfortunately a bibliography is also wanting. By giving a select list of books, pointing out the chief and best works in the bewildering mass of histories of German civilization in German, the author would have performed a great service to that rather large class of scholars and others who are not specialists in the field, but interested in the subject.

In spite of its shortcomings the book is a worthy effort and should have a large circulation, filling as it does a "long felt want." A second edition will give opportunity for enhancing its value by the removal of minor mistakes.

AMANDUS JOHNSON,

University of Pennsylvania.

SILBURN, P. A. *The Governance of Empire*. Pp. xi, 347. Price, \$3.00. New York: Longmans, Green & Co., 1910.

The author, a member of the Natal legislature, has sincerely tried to assist "the average politician or man of affairs" to an understanding of many matters—such, for example, as "the insidious and dangerous growth of Socialism in the colonies" (p. viii). To this and other ends he ranges from the Achaian League to the Union of South Africa. The framers of the American constitution, he forgivingly agrees, were "but slightly conversant with the classics" (p. 3); indeed "the Achaians, though true democrats, were not believers in the twentieth century Socialistic doctrine of representation going with taxation" (p. 7). But as the "judicious and occasional strengthening" of the Roman Senate kept the democratic party in "the weaker position" so "patents of nobility will always keep Socialistic and Republican parties within safe bounds in the British Empire" (p. 23). The further helpful intentions of the writer, his sympathy with those who cannot go "first hand to many of the authorities it is so necessary to consult" have led

to this history from "a colonial view" in order to arouse among his "countrymen, in the United Kingdom," a greater "pride in the Empire." In this connection, therefore, he notes that in England "the Wars of the Roses had resulted in the dissolution of the monasteries" (p. 83), and that in Virginia Lord Delaware displayed the "spirit of self-sacrifice on the part of the aristocracy, a spirit of which a republic, possessing no aristocracy, can never find an equivalent" (p. 91). He also states that "on December 13, 1759, Wolfe captured Quebec" (p. 106) and that a few years later Warren Hastings "succeeded in completely establishing the supremacy of the British in India" (p. 119). So much for the first six chapters which are clearly historical in intent.

The next four deal with the governmental organization of the empire to-day. Though a loyal colonist, the author admits that the "rapid development (of responsible government) is not an unmixed blessing. It has borne that rank weed, untutored democracy; and democracy untutored is Socialism" (p. 176). In the case of Canada, however, although "American political methods" have occasionally been introduced "by a few unscrupulous politicians" the "wise and far-seeing policy of building up (in Canada) a colonial aristocracy" is accomplishing much good, especially "in keeping under the insidious doctrines of Socialism" (p. 204). As to the Union of South Africa the question is asked (p. 216): "Can it be that a hasty and illformed legislative union containing all the tokens of insincerity and ulterior objectives will yet prove a blessing in disguise?" Nevertheless the author is a "sort of" federalist.

The remaining seven chapters treat of sea power, defense, communications, commerce, the press, and imperial federation. On the last topic the author feels deeply that the proposal of federation should come from the mother country, though he appreciates that the liberal government at home is "out of sympathy with the oversea possessions" (p. 323), and their leaders "openly admit that territory outside of the United Kingdom is an unnecessary luxury" (p. 329). As a "nation Great Britain is rapidly giving way to other nations and falling into the rank of second class powers" (p. 329). The remedy is imperial federation, which, however, must also lead to Irish home rule. To the present British constitution an imperial senate should be added. Democracy in the colonies has developed because of the lack of an aristocracy, for a colonial is "never considered worthy of more than knighthood." Hitherto aristocracy has been merely a national asset at home. "By extending aristocracy to the Empire the ranks of Socialism would be gradually but surely weakened, and the bonds of Empire would be considerably strengthened" (p. 344). Is it possible that the author has not as yet been raised to the peerage, because he is not dangerous enough as a Socialist?

Want of space prevents notice of typographical errors, chiefly as to dates and names. But the book is dedicated to "those corner-stones of the British Empire the Ancient Universities of Oxford and Cambridge;" and it supplies a map "illustrating Imperial Communication by Wireless Telegraphy," though an index is lacking.

ALFRED L. P. DENNIS.

University of Wisconsin,

Swift, F. H. *A History of Public Permanent Common School Funds in the United States, 1793-1905.* Pp. ix, 493. Price, \$3.75. New York: Henry Holt & Co., 1911.

This book is a good example of the type of work which is being done by that group of scholars who are devoting themselves to the study of education. The author has brought together from sources which were not easily available the more important facts with regard to the history and present status of public permanent common school funds. This volume marks the first attempt to bring together and to interpret the facts in this field.

The book is divided into two parts. In part one the author discusses the early sources of school support, the importance of school funds in the development of a system of free public education, the sources, management, and loss of these funds. In part two is given a summary of the origin, present condition, and administration of permanent common school funds in each of the states, arranged alphabetically by states. This section of the work is intended primarily for reference.

In the more general discussion found in the first part of the volume, the author makes clear the importance of school funds not only from the standpoint of the aid which they have afforded in the establishment of the schools in poor districts, but also calls attention to the other objects to which these funds have been devoted and shows clearly the effect that they have had in the development of our public school system. Attention is called to the fact that the oldest aim of such funds was the abolition of the school tax. Later there developed a second aim, namely, to incite taxation and to bring about an equality of opportunity and burden throughout the state. The author calls attention to the necessity existing to-day for a more efficient management of public school funds, and suggests the need for an investigation concerning the present status of these funds throughout the United States.

The material throughout the volume is most adequately summarized in tables which enable one to discover readily the situation in any state, and to compare easily the practice among these various units. Any student of education interested in its fiscal aspects will find this volume a veritable mine of information; a book well arranged and well written.

GEORGE DRAYTON STRAYER,

Teachers' College, Columbia University.

Tausig, F. W. *Principles of Economics.* Two vols. Pp. liv, 1131. Price, \$4.00. New York: Macmillan Company, 1911.

This latest comer in the field of general treatises on economics aroused great expectations, and, in the reviewer's opinion, those expectations will not be disappointed. The author states that the book is not written on the usual model of textbooks and is not designed to meet the needs of classroom instruction. This opinion seems correct, for the price, division into two volumes, a certain diffuseness in treatment, and the relatively large part devoted to practical problems, all militate against textbook use. But there is an

admirable clarity and definiteness of statement, which qualities, together with a wealth of illustration, will assure its wide use for reference.

In general arrangement and content, one first notices the absence of any separate treatment of consumption. Here Professor Taussig follows Mill—as he does in making his cross references by sections rather than pages. The ideas of utility, marginal utility, and diminishing utility, are brought into direct relation with price determination in the chapter on “value and utility.” As to the order of the main division of the subject, “Production” comes first, with “Value and Exchange” second, each division taking about one-tenth of the total space. Money and banking and international trade form the subjects of the next two books; and these are followed by distribution. Over one-fourth of the work remains and it is devoted to practical problems and taxation. The relatively great space given to the “book” on money, banking—especially banking—and crises, is perhaps the most notable point; though the length of the books on problems of labor and economic organization will also be observed. The space devoted to “Population” and the treatment of interest before rent are somewhat unusual.

As to the theory. Among other excellent features, the reviewer is struck by the wise definition of such elementary concepts as wealth and production, and the skilful handling of such points as the way in which cost of saving affects the supply of capital. The way in which difference in wealth distribution operates upon diminishing utility is also well handled, as is its relation to elasticity of demand. Purchasing power, we are told, must be included in the idea of marginal utility: marginal utility is a phrase used, for brevity, to indicate the complex conditions on which depends the price fetched by the last increment of supply. Yet, to the reviewer's notion, too much potency is given to “marginal utility.” That pregnant phrase is given such a place that at points it might be used interchangeably with “value.” Then what light does it throw to say that value is “determined by” or “depends upon” marginal utility? Is it not unnecessary to call actual price the measure of utility—is it not confusing? (p. 124). The various “cases” of value (fixed supply, constant cost, etc.) are separately treated, so as almost to suggest that different forces operate and that a different manner of determination exists in each case; and some will be inclined to criticise this treatment even as Mill has been criticised.

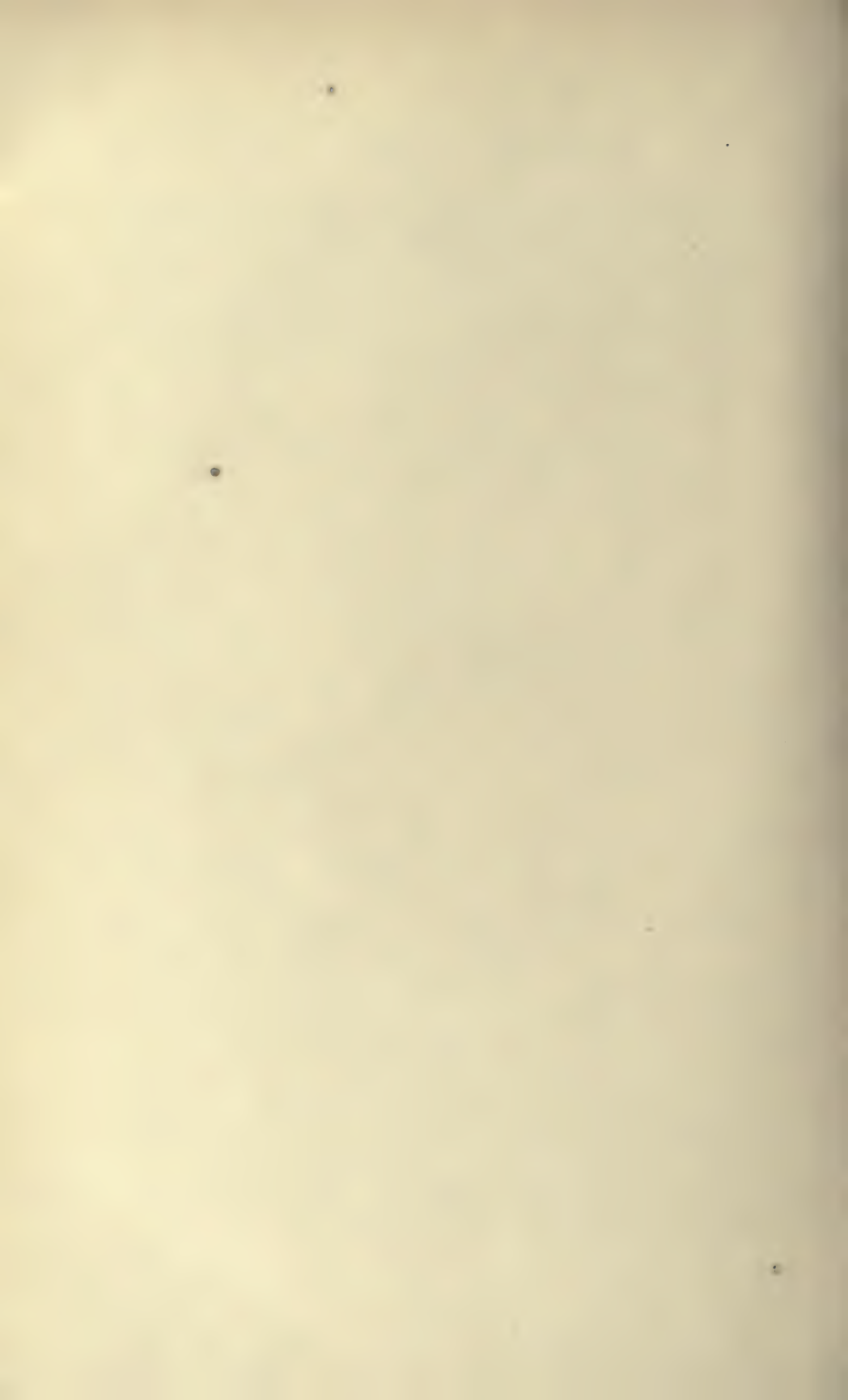
The “enlightened” Ricardian theory of rent is stated with unrivalled lucidity, embracing a convincing treatment of the relation of rent to price and the difference between land and capital. The problem of interest determination is solved by the marginal-efficiency route, little attention being given to the *agio* concept. But the author denies the possibility of imputing a specific product to capital; for “capital is itself made by labor; it (merely) represents a stage in the applications of labor” (197). The influence of Böhm-Bawerk is uppermost. The theory of wages adopted is substantially the one which aroused considerable criticism at the 1909 meeting of the American Economic Association: wages is the discounted marginal product of labor. The emphasis of the fact that labor is a “future good” like capital is valuable; but it is not made clear how the author's emphasis of the idea

that labor's specific product is inseparable is consistent with a determining marginal product. The reasoning smacks strongly of Ricardian influence at points (p. 205). Profits is treated as a special form of wages, the author deeming it impossible to draw a line between the two shares.

In questions of opinion and policy, Professor Taussig hits the nail on the head with a refreshing sanity of vision and common sense. It seems to the reviewer, however, that he is a bit hard on speculators.

LEWIS H. HANEY.

University of Texas.



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Efficiency in City Government



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CONDUCTED BY ROSWELL C. MCCREA

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THE PAPERS IN THIS VOLUME WERE
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ASSOCIATE EDITOR.

PART ONE

*The Need for Efficiency in Municipal
Government*

EFFICIENCY IN CITY GOVERNMENT

BY HENRY BRUÈRE,

Joint Director with William H. Allen and Frederick A. Cleveland of the
New York Bureau of Municipal Research and Training School
for Public Service.

Origin of the Movement

Through a catastrophe Galveston learned what many cities do not yet appreciate, that city government is the indispensable instrument of effective community co-operation. To equip its government to take leadership in rebuilding the wrecked city and to safeguard it from a recurrence of the disaster, the citizens of Galveston resorted to the commission plan whose growth and achievements were recently vividly described in *THE ANNALS*. Similarly, the efficiency movement in cities grew out of recognition of the dependence of community welfare upon government activity. It began in 1906 in an effort to capture the great forces of city government for harnessing to the work of social betterment. It was not a tax-saving incentive nor desire for economy that inspired this first effort to apply modern efficiency tests to municipal government, but the conviction that only through efficient government could progressive social welfare be achieved, and that, so long as government remained inefficient, volunteer and detached effort to remove social handicaps would continue a hopeless task.

The efficiency movement is not trying to convert city government into a master philanthropist. On the contrary it aims to remove city government from its isolation, and to make it the customary and accepted common agency for "getting things done" by all groups of citizens in the execution of public purposes upon which they divide either because of racial, sectarian, social, economic or political differences.

It is an attempt to substitute for fractional, isolated, incomplete, ill-equipped and cross-purpose social welfare work a city-wide, community planned and community executed program of citizen well-being. It recognizes in health work, public education, public

charities, police work, corrections, the administration of law and justice, housing control and public recreation, opportunity to deal directly with conditions engendering personal incapacity and community distress.

It is too much to say that effort to obtain efficiency in government originated with any single organization or was unknown before bureaus of municipal research began their work of co-operation with public officials. But it is probably true that not until 1906, when an experimental bureau of research was established, had any official or citizen agency directed its effort exclusively to learning the facts regarding city government and to constructive effort to promote efficient municipal administration.

Since 1906 citizens and officials of New York City have given persistent attention to the work of converting "ramshackle" into efficient government. Philadelphia, Cincinnati, Hoboken, Chicago, St. Louis and numerous smaller towns have organized and are financing agencies to bring about better city government through learning the facts regarding present government service, organization, methods and community needs.

Supplementing local work, the Metz Fund of \$30,000, established by ex-Comptroller H. A. Metz, has as its purpose, placing country-wide in the hands of municipal officials, officers of boards of trade, civic associations and chambers of commerce, precise information regarding the best administrative and accounting practices worked out in any American city. The Training School for Public Service with \$200,000 has begun an experiment in equipping men for public employment and civic work as distinct professional pursuits.

The President of the United States has organized a commission to apply the principles of efficiency to the federal government.

Each of these steps is directly traceable to the experimental test begun in New York in 1906 of basing citizen protest, citizen request, governmental plans, and administrative methods upon a scientific study of community conditions and the facts of governmental action, neglect, results and failures.

First Steps

So great has been the task, necessarily first undertaken, of instituting efficient business practices in city departments, that for these first years the major part of the work of citizen efficiency

agencies has been devoted to co-operation with public officials in reorganizing budget making, accounting, purchasing, timekeeping, store-keeping, and to providing a fact basis for administration. For this reason, despite already extensive emphasis upon health, education, housing and dependency, the idea is very general that those interested in promoting efficiency in government are concerned only with business methods, efficient accounting and the technical aspects of budget making, etc.—in short the means and methods of government rather than its aims and policies.

Systematizing public business has been necessary to equip city government to do the work already committed to it and to prepare it for the assumption of increased responsibilities. However well-conceived and well-intentioned the program of city government may be, its value to the community will depend upon the frequency with which accomplishment is checked against purposes and intentions, results achieved measured against standards of possible results, misdirection of effort and other waste detected and diverted into channels of needed activity.

While the efficiency movement aims, it is true, at efficient business administration in cities, the scope of its purpose is as wide as the five standards by which it holds municipal efficiency must be tested. These standards are:

1. Efficiency of service program or objectives towards which government activities are directed.
2. Efficiency of organization, with reference to facilitating the economical execution of the service program.
3. Efficiency of method which will provide the best means for performing each separate function and task of city government.
4. Efficiency of personnel—conceived of as a specially trained, socially minded, skilfully directed and permanently employed corps of municipal workers to man the organization, to devise, supervise and employ efficient methods and to execute an efficient program of service.
5. Efficient citizenship, equipped through intelligence regarding citizen needs, and armed with facts regarding government conditions and results, to co-operate with public officials in enlarging the usefulness of government and insuring its adherence to establish standards of efficiency.

1. *An Efficient City Program*

It is not necessary to reach out in the realms of imagination to find items for an efficient city program. Tasks already undertaken by government, badly executed or ignored, will in themselves provide a basis for measuring the adequacy of government service. Clearly to learn what government under existing laws and existing plans is responsible for is the first step in testing efficiency in city work. It frequently happens, however, that the most costly inefficiency is not extravagance or waste in executing work performed, but failure to so plan work that it will adequately meet community requirements. If departmental activities are misdirected, it is poor consolation to the taxpayer and to the public to know that taxes are comparatively low, that supplies are purchased at reasonable prices and that employees give full day's service.

Nowhere is inefficiency resulting from misdirected work more clearly shown than in the execution of public improvements. Wrong city planning and no city planning are costing American cities infinitely more than inefficiency and graft in construction of public works. It may be true that no public work in New York City has been more efficiently performed than the construction of the great East River bridges. Yet there has been no greater waste in all the hundreds of millions of dollars that the city has expended for public improvements, because planned without reference to the city's rapid transit needs, these bridges obstruct rather than facilitate the solution of this pressing problem.

Wrong location of school buildings because of lack of knowledge of the character and location of school population is not mitigated by economy and efficiency in school construction. Purchasing park lands in isolated and inaccessible sections can never be justified on the score of a bargain opportunity for acquiring real estate.

To frame an efficient city program, then, two steps are necessary: first, ascertaining the work and services that charters and general laws require and that government departments are authorized to perform, and which citizens now assume that government has undertaken; second, studying community conditions, both with reference to the already established activities of government and with reference to existing needs toward which community services have not as yet been directed.

A general social survey helps to bring together in a single picture

community conditions with which government is concerned. In large communities social surveys can best be made with reference to particular governmental functions or closely related groups of functions. Thus a study of education, health, charities, or public works departments would aim to produce facts regarding the scope and efficiency of present activities and the education, health, charitable or public improvement needs of the city as yet unaffected by the plans or activities of the departments in question.

Obviously, efficient health work is impossible without knowledge of community health condition. This fact is so commonly recognized that health departments, wherever they are more than "nuisance" inspectors, require the registration of births, deaths and communicable or contagious sickness because these give notice to health authorities of conditions currently demanding action. But merely to record statistics does not improve health or stamp out disease. Health statistics should lead to examination of causes. Determining causes should prompt action for their removal.

Up to 1909, the health department of New York confined itself in its anti-tuberculosis work to requiring physicians to report cases, transferring to hospitals cases in the last stage of the disease, and experimenting in the sanitarium on treatment of incipient cases. In 1909, on the basis of maps showing the number of reported cases and their frequency in congested areas, and a study of environmental conditions, the department received funds to conduct a continuous educational campaign in the families of all tuberculosis patients where private physicians were not in attendance. Since then it has directed and encouraged the tuberculous poor in habits of living which both minimize the danger of contagion and improve the patient's chances for cure.

In child hygiene work, it required a great many years for New York's health authorities to associate high infant mortality with parental ignorance and impure milk. When this fact was discovered the measures of attack included home visits to sick babies, educational placards distributed in the tenements, and class room instruction among school girls in elementary hygiene of child-care. But a marked reduction in infant mortality was not brought about until study of home conditions showed that tenement mothers needed in addition an opportunity to obtain pure milk and timely advice and medical attention in advance of the sickness of their babies.

In the first six months of municipally conducted milk depots and baby clinics, supplemented with home visiting by nurses, 1,110 lives were saved.

Sectional surveys of city conditions bring forward at once increased opportunities for effective community co-operation. For some time past there has been in progress, under the direction of Comptroller Prendergast, a study of New York City's relations to private charitable institutions. This study began to determine the efficiency and economy with which city funds, now aggregating \$5,000,000, are expended by these institutions. But infinitely more important than the many opportunities for better management which the study revealed was the evidence brought forward that, however efficiently the institutions themselves might be conducted, the city, so long as it confined its efforts to present activities, could not deal efficiently with problems of public dependency.

Thousands of children are publicly supported in private institutions, committed because of the death or dependency of their parents. The reasons for their commitment are methodically recorded in great registers in the children's bureau. Once a year the causes of commitment are summarized and published in the report of the department of charities. They show that illness, death and desertion are the principal reasons which lead parents to give over to the city the care of their children. But despite its records and despite the apparent preventability of these causes, the city still limits its concern for needy children applying for commitment to placing them in institutional homes.

No city government, no citizen agency, no community can achieve efficiency in any branch of city service merely by bringing about precision, orderliness and economy in the performance of existing tasks. City government must match its efforts against a background of knowledge regarding opportunities for service. In Milwaukee, where a Bureau of Efficiency and Economy has been established by the city government, a definite part of the Bureau's program is to study such questions as unemployment, free legal aid and women's wages. The new mayor of Schenectady proposes to make the city government a laboratory of social inquiry in order that every social need of the community which may be satisfied by co-operative action may be brought to the attention of the public and officials, and where funds and limited powers permit, may be incorporated into the program of government service.

HOW A CITY'S SOCIAL PROGRAM EXPANDS WHEN FACTS OF NEEDS ARE LEARNED

Division of Child Hygiene, New York City

S. JOSEPHINE BAKER, M.D., Director

1912 Child Hygiene Budget \$582,895

| <i>Activity Before Investigation of Needs, 1908</i> | <i>Investigation</i> | <i>Activity After Investigation of Needs, 1912</i> |
|---|---|---|
| A (1) School children inspected for physical defects. | Tests to show that parents will obtain treatment if need is explained verbally by nurses or inspectors. | Clinics for treatment of children found with defects. Vigorous follow-up work all year round by nurses explaining to parents necessity for treatment. |
| (2) 70 per cent of children found defective. | | Dental clinics requested. |
| (3) Postal cards sent to parents advising treatment. Result 8 per cent reported treated. | 88 per cent of children found defective treated in test by follow-up methods. | 85 per cent of children with defects reported treated in 1911. |
| B (1) Relief work, sick babies treated. | | Preventive measures adopted, babies kept well. |
| (2) Babies visited only when parents, inspectors or charity societies report baby sick and parents are unable to employ physicians. | Study showed ignorance of mothers and bad milk responsible for baby deaths. | 55 milk depots established. All year round campaign. Instruction to mothers in homes, medical advice to mothers for infants in depots. |
| (3) Visits made only in summer time. | Summer campaign started to test efficacy of education by nurses at home visits, little mothers' leagues, mothers' classes, etc. | Special "baby" milk provided for transient mothers at reasonable rates. |
| (4) Result — infant mortality from diarrhoeal diseases totals 5,000 per annum. | Milk depots experimented with. | Saving of lives of babies under one year in 6 months' experiment, 1,183 — all caused. |

The program and objectives of city government action will continually change with the growth of population and the heightening of demands upon government service. But, in framing the budget of expenditures, annual opportunity is given to cities to revise their programs, to redirect the activities of their departments, to extend or to check them. Scientific budget-making recurrently presents the occasion for using facts regarding community conditions and governmental service in promoting government's usefulness and efficiency.

For years the board of estimate and apportionment of New York City has refused to grant full amounts requested by the health and charities departments because it was not convinced that moneys asked for were needed to protect the city's health or to care for its destitute.

Reluctance to appropriate has been partly attributable to the uncertainty that funds requested would be used with fullest efficiency. But it has also been due to the fact that neither of the requesting departments, the community, nor the board of estimate and apportionment, had definitely pictured to itself the wide gap existing between health and charitable services now rendered and the health and charitable needs of the city.

2. Efficiency in Organization

The general features of city organization are properly and usually determined by charter provision. But to provide for a board of commissioners, a mayor and council, a commissioner of police, a director of public safety, or a commissioner of public works, is not making provision for an organization to conduct the general city government, or police, fire and public works departments. The major divisions of municipal activity consist of groups of sub-functions, each involving a special character of work and requiring special forms of organization and special ability and training on the part of supervisors.

Fortunately, legislatures or charter commissions are not required to frame schemes of charter organization out of whole cloth. Even commission government is not new under the top. Charter legislation is now generally charter revision or charter rearrangement. Even where charters are first drafted by well intentioned citizen amateurs, lines of activity and forms of organization are more or less affected by existing activities and existing organization.

Fanciful innovations may be made to correct assumed existing defects in organization because they seem to those who frame them especially ingenious devices for obtaining efficient government. But just as a wise program of service for government must be based on knowledge of existing conditions, so a plan of departmental and internal departmental organization must be based upon an understanding of the existing organization, its merits, defects, ability or failure to meet service requirements.

Perhaps the most scientific attempt to frame a charter for any American city was that made by the Ivins Commission appointed for New York City by Governor Hughes in 1909. When this commission began its work considerable dissatisfaction prevailed with the existing government of New York City. Various city departments had for several years been undergoing investigation which revealed innumerable breakdowns and a general low state of efficiency. A great many theories had been formulated to correct defects so made known. Members of the commission themselves had either held public office, were public officials during their time of membership in the commission, or were active in public work, and were, in consequence, possessed of definite views regarding changes.

The commission, proceeded, however, on the assumption that intelligent charter revision could not be accomplished without first hand, fresh knowledge of how government is now organized and how it now conducts its work. Actual organization and actual procedure could not be learned from a study of the charter. Heads of departments, never having analyzed the machinery under their direction, could not be called upon to give an accurate description of how it was constituted and how it operated.

The Bureau of Municipal Research, therefore, was requested to chart the organization of every city department to show by schedule what was being done, who was doing it, the organization provided, and the exact powers and duties of every unit in the departmental structure. For the first time what the city government was in fact was shown graphically. By reference to the charted plan of organization and schedules of powers and duties, discussion of defects in organization was immediately definitized. Overloaded divisions, underloaded divisions, conflicts in authority, overlapping or incongruous functional responsibilities were brought to light. By means of these organization charts it was possible to guard against

omissions in the revised charter, and to learn where it was wise to prescribe definite forms of organization, and where discretion in this regard should be left to local boards or officials.

In summary, efficient planning of organization for charter prescription will therefore, include:

1. Study of existing organization and relation to powers and duties.
2. Reclassification, if needed, by functional groups.
3. Eliminating incongruities of functional responsibilities or excessive or under responsibility.
4. Eliminating conflicts of jurisdiction.
5. Centralizing all activities of one kind, so far as possible, under one general administrative control.
6. Leaving to local authorities and administrators determination of details of organization, divisional structure and distribution of duties.

The actual task of building up an efficient administrative machine falls to the lot of the administrator. It is for him to place the right man in the right place, to functionalize work and group subordinates, to clarify responsibility and the relations of subordination, to specify with definiteness the tasks to be performed by each employee considered with reference to kind, quantity and time of performance. Efficient organization will not only be specific in the assignment of duties, but will provide for efficient supervision, facility of contact between supervisors and subordinates, on the one hand, and between supervisors and executives on the other, for conference on work plans of organization problems and for flexibility so as to avoid recurring periods of over-pressure and under-pressure.

When President McAneny began the reorganization of the departments of the Borough of Manhattan he found in the Department of Public Works five separate accounting offices, each maintaining its original books of entry, its independent appropriation and fund ledgers, and employing separate and unsupervised staffs of book-keepers and accountants. A single set of departmental accounts, one accounting office under one supervisor, has taken the place of the five independent offices, and not only does the work formerly committed to the five with lower expenditure, but with infinitely greater accuracy and usefulness.

Four different divisions of the Department of Public Works dealing with fractions of the problem of maintaining sidewalks, Mr. McAneny consolidated into one, with a reduction in force from 35 to 15. Under old conditions each division foreman attempted to justify the continuance of his special service by manufacturing work to do and spreading out as thinly as possible work actually required. Under reorganization, with centralized responsibility for every feature of sidewalk maintenance work—street signs, sub-surface vaults, incumbrances and paving—no task is completed until all others are completed, and, because of the concentration of thinking and action with respect to the whole problem, noteworthy improvement has resulted in sidewalk conditions.

As formerly constructed, before its "reorganization from top to bottom," the finance department of the city of New York consisted of a series of separate jurisdictions presided over by practically independent division chiefs theoretically responsible to the comptroller, but because of a monopoly of information, practically exercising undisputed sway each in his own jurisdiction. Accounting and auditing functions were so broken up that each separate step invited the establishment of an official principality. In each of these separate divisions were separate staffs and separate records containing information frequently recorded in similar records maintained by other divisions of the department.

Under reorganization, accounting and auditing functions are centralized, detached auditing bureaus brought together under one control, every step in the process of audit and accounting definitely prescribed, and necessary information recorded in one place for the common use of every officer or interested employee of the department.

Few city departments will retain their present organization if commissioners or directors will have existing organizations diagrammed, functions listed in detail, and actual duties described. An honest photograph of the average city department will generally lead an efficient head to take one of the following steps:

1. To group and centralize control over like general functions.
2. To put together detailed activities belonging together.
3. To place emphasis upon important work now carried on as a "side issue."
4. To divide work now done by one employee among two or more (rarely).

5. To give to one employee work now done by two or more (often).
6. To abolish unnecessary steps, work, and positions, "old fashioned" habits, private memorandum records, soft snaps, drudgery, "free lance" jobs, irresponsibility in subordinates, "roving commissions," permanent "special" assignments, laxity or redundancy in supervision and conflicts in authority.

3. Efficiency of Method

Wrong, roundabout, old fashioned, slovenly methods cling to city government as a last refuge from the Juggernaut Efficiency. Even commission government gives shelter to work methods that efficient private enterprise discarded a generation ago. Adoption of the board-of-directors analogy to private business organization has not dispelled the false notion that, because of peculiar governmental conditions, public business methods must be different from private business methods. Contagion in commission government has not meant contagion in the adoption of efficient business methods. Houston in 1902 installed a modern system of accounting—such as one would find in a well conducted private undertaking. It gives to public and officials alike a true picture of the city's financial operations. This system was the one asset of efficiency handed down from the old government which the commission plan succeeded in 1905. The success of Houston's new government has inspired scores of cities to try the commission plan, but in adopting the new form they have ignored Houston's splendid example in good accounting.

Dallas and Fort Worth, Texas, are only a few miles apart. Both are important commission governed cities aiming at efficiency, yet each goes its own way in respect to business methods. Fort Worth has adopted Houston's asset and liability accounting system. Dallas continues on a cash receipt and disbursement basis. Fort Worth has a modern, centralized purchasing agency cutting down the cost of supplies. Dallas continues the wasteful practice of permitting each department head to purchase his own supplies.

Interchange of experience has been more difficult between cities conducting the public's business than among competitive private business undertakings. City comptrollers sometimes convene for discussion, but spend valuable time in protesting the superiority

of their particular "systems" and heckling those who have the temerity to suggest improvements. State governments, theoretically empowered to regulate municipal as well as private corporations, delight in devising as many different ways for cities to conduct the same kinds of business as the ingenuity of legislators is able to suggest. More cities have imitated New York's White Way than have adopted its efficient budget or accounting system, or would ever have heard of them had it not been for the persistent educational campaigns of citizens' agencies.

Uniform charters have not meant uniform efficiency of methods that determine the success or failure of any charter plan. New Jersey, under Governor Woodrow Wilson, is taking leadership in adding to a uniform commission government law, a uniform business code, including procedures for assessments, purchases, budget making, accounting, public improvements and the rest of the ninety per cent of city business that can be conducted in only one best way in cities of comparable size, and that way the best for all of them.

This issue of *THE ANNALS* will contain many papers describing steps already taken by New York, Philadelphia, Cincinnati and other cities to put efficient methods into operation. They will iterate and reiterate such terms as, *unifying, standardizing, systematizing, clarifying, co-ordinating, controlling*, which are the veritable shibboleths of the efficient city government campaign. They represent the processes now employed to drive waste out of city government and to make graft unprofitable because of sure detection. For six years archaic city business methods have been under attack. New York has now an accounting system equalling that of the Pennsylvania Railroad. Learning the art of standardization of supplies from the Union Pacific and the Canadian Pacific Railways, New York is setting an example to every American city in definite description of articles to be purchased, selection of articles with sole reference to requirements and far seeing economy, and in testing and inspecting deliveries to ensure their exact conformance with exact specifications. To interpret the specifications both for purposes of bidding and for purposes of inspection, it has begun the development of a standard room where examples of the articles specified will be available for examination. In its new municipal building it will conduct a testing laboratory unexcelled in the United States. All these steps have been taken to ensure accuracy and economy in purchases in a city where six

and even fewer years ago practically every supply contract or order was an invitation to exploiters to gouge. Messrs. Lindars and Sands in their paper on budget making¹ tell the story of New York City's budget revolution. By substituting methods of precision for pull and guess work, light for darkness, critical examination for dark lantern forays, the budget has been made the most telling instrument for progressiveness and efficient management in the hands of responsible officials and an intelligent public. Efficient budget methods automatically save millions a year, whose waste in the grab bag era never came to light.

The work of uprooting old methods and installing new (new to city government) has by no means been completed. Perhaps New York has been raised from forty per cent to sixty-five per cent efficiency, but hardly more than that. It is estimated that still one-tenth of a ninety million dollar pay roll is wasted by unnecessary employment, low grade service or misdirected energy. This may be high, although the waste is undoubtedly very great, as Mr. Welton's paper shows.² For example, Commissioner Thompson, of the Department of Water Supply, Gas and Electricity, states that he is compelled to waste \$100,000 a year merely because restrictive civil service laws prohibit the facile removal of veterans, including volunteer ex-firemen "billeted" on the city through its pay rolls. Enormous waste still continues in supply purchases, because the work of standardization is only getting under way and because New York still purchases its supplies through seventy-five purchasing agents instead of one. But the waste remaining no longer terrifies the conscientious official or city betterment worker. Mystery has been taken from it. It is no longer regarded as the discouraging, inevitable accompaniment of public business management but as a fungus growth which energy, light and scientific methods quickly destroy.

4. Efficiency of Personnel

Where there is method, record and publicity, many incompetent employees cultivate efficiency. Employees in boiler rooms respond almost automatically to the tell-tale of recording devices, showing water and coal used, amount of steam developed, current generated. Supervision, comparison time reports, cost data, efficiency records—

¹ See page 138.

² See page 103.

all prove powerful stimuli to the slothful worker and encouraging incentives to the energetic.

With new standards of service, organization and method, new standards of personnel develop. New motives in city government will shift the basis of effort to improve the quality and character of city employees. Civil service reform to protect communities from exploitation by the spoils men in office will increasingly become less necessary than civil service reform to help to success the public official who wants to make good. Efficient officials cannot afford to ~~dispute~~ with experienced efficient employees because of political affiliations or partisan inactivity. Efficiency-determined communities cannot afford to erect barriers to dismissal of employees who do not measure up to new standards of serviceability.

Permanency in city employment is important, but less important than capacity and willingness to serve. The battle against the spoils men has made civil service reformers more intent on competition before appointment than upon performance after appointment. Service records, time sheets, efficiency tests, formulation of work "routines" will vitalize the now too theoretical power of discharge for incompetence. Three years ago it was an "insult" and humiliation to require a city employee to keep time records. Now time sheets and service records based upon them are supplanting impression and pull in determining fitness for promotion.

Direct primaries, non-partisan and preferential voting, give to the electorate opportunity for free selection of elective officials. The recall or removal on charges, as exercised by Governors Hughes and Dix in the State of New York, make abuse of office or official incompetency less likely to escape with impunity. But just as competitive selection on technical or educational tests has failed to produce the specially trained employee, so these new devices of popular control will fail to produce specially equipped candidates for office. City government needs special training of personnel, elective as well as appointive, both before and after employment. Germany for years has conducted public service schools. Cincinnati, beginning this year, through its municipal university, is providing field training in government service. The Training School for Public Service conducted by the Bureau of Municipal Research in New York is a private demonstration of a public need that will presently, no doubt, lead to the establishment of special training courses for public

service in public educational systems and in universities and technical schools. Indeed, since the opening of this school, the College of the City of New York has announced courses for city employees, designed to prepare them for higher positions.

Social service training of city visiting nurses, accountancy instruction for city bookkeepers, practical courses in administration for subordinate administrative officers, instruction in municipal engineering problems where these differ from private engineering problems, offer immediate opportunities for bettering public service.

Schools of this character are appreciated in private business. The New York Edison Company conducts a practical school for its employees and aims to prepare those who complete the course for responsible positions in the service of lighting companies. The course is not compulsory, but those among the employees who do not think it worth while to take it, the company does not think it worth while to consider as available for important advancement. Similar schools are conducted by other industrial establishments.

Cities have no greater problem than the training of personnel. Employees cannot be efficient unless they feel the incentive which comes from definite opportunities ahead. The city that first learns to deal with its working forces on some other basis than abuse, indifference, cajolery, favoritism or fear will come very near discovering the secret of efficient government. Promotional systems based upon work and service tests, retention based upon efficiency records, compensation, equalized without reference to political drawing-of-water or hewing-of-wood, standardized on the basis of reasonable standards of living and like compensation for comparable service in private employment are problems efficient government workers must promptly attack. Chicago through its civil service commission is taking the first steps in this direction. New York's board of estimate and apportionment has "resolved" to follow suit. But other cities lag far behind. Commission government has not generally included even competitive selection of employees. Far famed Galveston has no civil service law and is prohibited by its charter from going outside of the tiny island upon which it is built to find its employees, big or little. Milwaukee had to dismiss an efficient commissioner of public works because he happened to live in another beloved state at the time of his appointment. The New York legislature, at the suggestion of a Tammany Assemblyman has recently

been considering a law making it mandatory for public employees in that state to conform to the benighted Wisconsin rule both before and after appointment.

The tinsel superiority of the conspicuous officeholder establishes autocracy in city departments where co-operation should rule. Bootlicking is still expected by many public officeholders, although private business has long ago learned that conferences with employees, participation in work planning and participation in credit for work done increases dividends.

5. Efficient Citizenship

All the steps taken to develop efficient government provide as well for advancing the efficiency of citizens in their dealings with government. For most citizens having livings to earn, contact with government facts must either be confined to some special line of activity or must be a vicarious contact established through a civic agency. Whatever intelligence the average citizen will have regarding the details of government will continue to be gained as now, either from personal observation of physical conditions or from newspaper accounts. Where a fact basis for information regarding city business is developed newspapers will provide facts instead of gossip, hearsay or scandal.

The 1911 New York budget exhibit was visited by nearly a million persons, but the facts which it presented regarding city finances and needs were read by millions of readers of countless columns of newspaper discussion. Any citizen can tell when the pavement before his door is neglected or when city water is discolored, but no citizen can generalize on these observations or learn from them anything at all regarding the city's actual efficiency.

Where government is progressive a progressive commercial organization is likely to be found. Commission government, for example, is often made a part of the progressive programs of "boosting" commercial organizations.

Boards of trade, chambers of commerce, city clubs, women's clubs, churches and taxpayers' associations are the types of agencies existing in most communities which may profitably make the interpretation of city facts a part of their regular activities.

The first need of citizen efficiency is adequate publicity of city facts. Municipal reporting is still a wordy, uninforming and hopelessly unreadable utterance of miscellaneous items. A very definite

obligation of the efficiency effort is to develop standard city reporting. A city report to get inside the minds of citizens, however intelligent, must be brief, prompt, explicit and so framed as to throw into prominence significant facts that tell the story of action and efficiency quickly. City reports most everywhere are still intended for printing only and not for reading, understanding or interpretation.

If school children, instead of being taught the profound (rapidly disappearing) differences between judicial, executive and legislative functions, were taught how to read city reports and what are the significant facts to look for and demand, intelligent citizens might come to include in their intelligence some idea as to what is going on in the city hall.

Take for example health. Why should not a high school pupil learn that the efficiency of the health department may be gauged by some such facts as:

The death rate.

The infant mortality rate.

The measles, scarlet fever and diphtheria rates (morbidity and death).

The bacteria count of milk—maximum, minimum and average.

The number of school children treated for defects.

The number of nuisances abated, etc., etc. All as compared with previous periods.

At least quarterly a consolidated comparative report of significant efficiency test items should be published by every city government. From ten square inches to a postal card should meet the space requirements of these statements in accordance with the size of the city and the number of its municipal activities.

Civic intelligence does not depend upon making every public spirited inhabitant of a city a fact depository regarding city business. A very large majority of citizens, however, now belong to some organization the success of whose work depends in part or at least on one or more of the activities of government.

Conference and co-operation between business organizations or social workers' associations on budget matters, public improvements, school and health needs, and joint action wherever that is

possible will accomplish results with greater feasibility than the isolated activity, petitions or clamor of a dozen isolated organizations. Every city pretending to want efficient government should have a citizen supported fact center through which each of these organizations may operate to learn of government activity and to influence government work.

Enlightened self-interest when turned toward government may lead to improvement. Taxpayers demanding economy may effect economy by helping in the work of administrative betterment. Better administration enables greater activity in health, charity and education. Automobilists, dreading bumps and wrenched cars, furnish an always available support for effort to improve street pavements. The Italians of East Side Manhattan recently conducted an exhibit to show from their own standpoint the governmental needs of their locality. Appeals to the pocket interest of women clubs give backing to weight and measures campaigns benefiting all. Every motive for good government must be availed of. To show that women are intelligent enough regarding public questions to vote, a woman's club in a Hudson River village is planning a budget exhibit. The demonstration will doubtless win converts to equal suffrage but by energizing the village government the exhibit will help the most ardent anti-suffragists.

Citizens of larger cities must frankly recognize the need for professional service in behalf of citizen interests. Bureaus of municipal research concentrate on one point of attack, the community interest of groups of citizens. Even efficient private citizens cannot deal helpfully with expert governmental questions.

Efficient citizens will evidence their efficiency by supporting constructive effort for governmental betterment by readiness to understand facts and to co-operate when special problems arise, and will insist that all organized welfare effort relating to any matter affected by government action or service shall seek to establish efficiency in government as the first step in improving community conditions. The most inefficient citizen is one who sends his child to a private school *because* public schools are inefficient, who collects his own garbage *because* public collectors are unreliable, who paves his own street *because* a highway bureau is incompetent, or employs his own watchmen *because* police are undependable. Community welfare is made up of the individual welfare of the inhabitants of a community.

Few men or women are so free from dependence on government service that, once their indifference is overcome, enlightened self-interest will not stimulate them to co-operate in effort to promote efficient government. Where self-interest fails there remains civic pride, social interest and public spirit which now and again really do help in the warfare against inefficient government.

THE NEED FOR COORDINATING MUNICIPAL, STATE AND NATIONAL ACTIVITIES

BY FREDERICK A. CLEVELAND, PH.D.,
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The customary attitude of the citizen toward the government is one of complaint. Toward the officer, the average citizen assumes an air of superior wisdom. He is sure that he himself would be able to direct any public office in a very effective manner. While formally deferential, a reported shortcoming or complaint causes the citizen to question the officer's motives, his judgment, his ability.

The Citizen and the Government

This may be one of the necessary results of popular sovereignty but under present conditions the feeling of citizen-superiority is much mixed with a feeling that the sovereign is being victimized by a group of inefficient conspiring public servants. No complaint is heard, however, which suggests that there is anything the matter with the sovereign. In order that we may put ourselves in an attitude of fairmindedness toward the public officer let us as citizens ask ourselves a few questions:

How much thought do we give to the problems with which officers of government are confronted?

How many of us who are complaining about waste and inefficiency in public service know:

What the government really is.

What the government is doing.

What are the conditions surrounding the public servant who is being criticised?

What results are being obtained?

What is the matter with these results?

What changes in equipment, in conditions, in institutional methods, in qualifications of persons charged with official duties are necessary in order that the officer may obtain the best results?

Is the citizen, our popular sovereign, discharging his full duty and responsibility?

Does the citizen (man and woman) know what are his unused powers, his duties, his responsibilities—what it is necessary for the citizen to do in order that the officer may be made effective as a public servant?

It is commonly assumed that the property owner and the taxpayer is the one who is primarily interested in the economic management—in waste and inefficiency of government. This theory has been skilfully taught and is commonly accepted. Is it true? If we go to full length in the consideration of what a vigorous, well-ordered, responsive and responsible government may do for the protection of property may not all this and much more be said for the need of a well-ordered responsive and responsible government for the protection of the individual?

Democratic government was not devised for the protection of private property—this has been only an incident. Through centuries of conflict it has been evolved as the welfare agency of the individual. It is the instrument created for the protection of the man as man whether he be rich or poor. It is the organized means for shielding the individual from what otherwise would be destructive evils of social and economic conditions for which the individual is not responsible. Without a dominant controlling agency more powerful than any combination of private interests, not only would the individual suffer but the limitations of society would make progress impossible.

Taxation is only the means employed for equating the cost of service rendered or to be rendered by the government. If the officer is inefficient it is not the taxpayer as taxpayer who suffers but the citizen—each individual beneficiary of the trust fund created by means of taxation. With growth of great centers of population, with increasing need for governmental activity, subversion of revenue and waste of public resources becomes a more direct loss to the weak than to the strong. This is necessarily so for the reason that persons of large private fortunes may provide the means for protecting themselves; being protected in the ownership and use of properties acquired they are able to obtain wholesome food and surroundings, comfort and enjoyment. Persons who have less fortune must depend for wholesomeness of food, for healthfulness of

surroundings, for comfort and enjoyment on government undertakings, government regulations and control. The hope of the individual lies in efficient government—in the most painstaking administration of the funds and resources that have been placed in the hands of officers for welfare uses.

Our Government a Group of Incorporated Public Agencies

The services and expenditures incident to government are not those of a single agency, but of a long list of agencies. Our government is made up of a group of public corporations, each of which holds its charter from the people direct or from the representatives of the people. In order to protect the individual against the usurpation of power by persons clothed with authority, democratic government has been so incorporated that each agency (and within each agency, each officer) has a strictly limited jurisdiction. That is, there is no one officer, or group of officers or corporation which is permitted to hold the balance of power.

The very complexity of our organization makes the problem of government difficult.

The purpose of this paper is not to consider the loss to the commonwealth due to inefficient management of public affairs, but to point to the lack of intelligent consideration of the needs of the people and of what the government is doing to meet these needs.

The Magnitude of the Business to be Considered

The government is spending not less than eight millions of dollars each day for public welfare ends. It has undertaken to render service almost as varied in kind and exacting in technical requirements as the combined employments and activities of the people in private life. Yet the fact remains that we have not provided ourselves or our officers with the means of obtaining information about what is going on, nor have we as citizens given to the subject enough thought to decide what manner of information we need. The government has suffered more from citizen neglect than it has from official incompetence. If each citizen were to keep an accurate record of his thoughts, the average time devoted to gaining exact information as a basis for thinking about matters of public concern would be found to be almost negligible. In consequence those officers who are devoting themselves to public service are harshly

criticised by an ignorant public who become mere tale-bearers and *a priori* statesmen; the officer is thwarted by selfish interests, in the end discouraged—not because of the inherently greater difficulties of the problem of public business as such, but by reason of the ability of designing individuals to get the attention of the public—to obtain audience with the citizen as sovereign for the consideration of plausible complaints about officers, while the officer himself, who is working for better things, is not able to obtain respectful attention for his constructive proposals.

*Character of Information Required for Efficient Management of
Group Organization*

The one thing which a shareholder in a group of private corporations insists on is an up-to-date statement of facts; the one thing that each trustee of a corporation in a complementary group insists on as a guide to judgment with respect to the policy is an up-to-date statement of facts; the one thing that the executive of a great private corporation finds indispensable is an up-to-date statement of facts. To be useful these must not only be up to date, but the many details must be so analyzed and summarized that the shareholder, the trustee, the officer may catch at a glance the significant changes—the conditions and results to which attention should be given.

The one thing that the citizen (the large shareholder in a group of public corporation), the legislator, the officer should insist on is an up-to-date statement of facts; one from which the citizen, the legislator, executive officer may catch at a glance the significant changes—the conditions and results to which attention should be given. These statements of facts should be so analyzed and summarized that the significant relations may be readily grasped not only for each corporation but for all. To do this the statements of fact should be prepared on common lines. That is, since each corporation is only a part of a whole which constitutes the government, since the powers, duties and responsibilities of each have been divided simply for organization reasons, but all have been created to serve the common needs of the people, each of the statements of fact should represent its part. Ability to state facts on common lines depends on the finding of a common basis for classification for each. This is found in the common welfare purposes of the government—

the part taken by each in the performance of functions prescribed for serving common ends.

Having in mind this basal need of the citizen, the legislator, the officer, for complete and up-to-date statement of facts concerning the activities of the government, and for having these facts grouped according to common activities or functions, it is of interest to note how far the American people have provided themselves—how far short we have fallen in our public corporate organization as compared with private corporate organizations.

Ignorance of Public Affairs a Menace to Honesty and Efficiency

An ignorant public is a constant menace to the officer who wishes to do his duty. An informed public is the best insurance that a public-spirited officer may have against the wiles of the "grafter boss." For lack of exact data public opinion is not cast in an exact mold. The "will of the people" is an emotional reaction actuated and controlled by the "Committee on Rumor." The "Committee on Rumor" is the convenient tool of selfish interests. This is the kind of public opinion which surrounds both citizen and officer. This is the background for executive action. The "Committee on Rumor" is in turn actuated by a selfish group of spoilsmen that dominates our institutions, our policies and our politics and will continue to do so as long as complete, accurate and prompt information is not made available in form which may be readily assimilated. Waste and inefficiency in government is the natural result of inability on the part of citizens and on the part of officers serving them to see the problem of government in perspective and to think intelligently about questions which are presented for expression of opinion and for action. The loss to the public is not expressed by the millions of resources that are directly wasted in the conduct of public enterprise but in the indirect results—in failure of the government to reach out and control those energies and institutions which have been organized for anti-social ends, in the waste of public resources resulting from failure to conserve the health, welfare, happiness of the individual. The demand for efficiency must go farther than to require that the government shall get a dollar for every dollar spent; it must constitute a demand that the government is doing the thing most needed, is conserving those ends and purposes which can not be adequately reached through private undertakings.

What is Involved in being Intelligent about City, State and Nation?

Broadly speaking, the many agencies which have been organized for the promotion of general welfare may be considered as of three classes—municipal, state, and national. The need for the coordination of municipal, state and national activities is the need for bringing into effective working relation all of the many parts of the group of governing institutions that have been established for the common good. It is a need for a more enlightened citizenship as a background for more effective service. It is a need for a new kind of civics in our schools; a new type of civic organization by means of which citizens as citizens outside of the government may be able intelligently and effectively to co-operate with officials. It is a need for a new standard of expressions for organs of publicity; a need for perspective which will enable each citizen to see what are the ends and purposes of each great commonwealth, what its complex machinery for rendering service; it is a need for intelligent consideration of the organization, personnel and equipment best adapted to make the officer efficient in doing the many kinds of work undertaken by the government. Initially, it is a need for more effective means whereby both the citizen and officer may have brought before them a complete, accurate and prompt statement of facts which will represent what is taking place, which will get before the minds of thinking individuals such summaries of result as may be brought to the test of enlightened judgment.

Within its field the national government is spending approximately one thousand million dollars annually. Cities having a population over thirty thousand are spending each year more than the national government. Besides these are states, minor cities and towns, counties, townships, and other local jurisdictions, each organized for general welfare purposes, each of which is spending its quota. It is commonly assumed that it is not necessary for the alderman, the mayor, the administrative head of a municipality to know what is being done by the state and national government, what is being done by the various county and other local agencies. Similarly it has been assumed that this information would not add to the effectiveness of either state or national administration or to the intelligence of national or state citizenship. The assumption is obviously wrong. How may the congress or the President of the United States think about what legislation is needed for the country

as a whole; what administrative measures should be taken by the federal government looking toward the protection of health, unless they may know what the several states and many cities are doing to protect the health of citizens within their respective jurisdictions; how may each of these many agencies have before them the problem of education; how may each of them think about the organization which should be provided, what funds should be provided, what equipment is necessary, what the administrative requirements in order to meet the demands of the people for better education, the better training of the young, unless persons charged with responsibility for controlling the activities of each of these several agencies, unless each may know what the other is doing? The necessary background for thinking about any of the questions related to government must be:

Exact information pertaining to the needs of the people.

Exact data with respect to the manner in which each agency is provided for these needs.

Provisions Made for Obtaining Information About the National Government

If a citizen were to undertake to inform himself about the government of the United States he would have before him a life work. Until recently there was no means whereby he might readily ascertain how the government was organized.¹ There is no one place where one can go to find out what the government is doing or what results are being obtained. To get even a partial story of activities and performances it would be necessary to rummage the libraries and records of every department and independent establishment at Washington. Even the preparation of a statement of expenditures for work would require the analysis and recapitulation of reports prepared in pursuance to ninety different acts of congress which result in nearly two hundred reports relating to financial matters. The hopelessness of the quest further appears when it is found that in no two departments and in many instances in no two bureaus in the same department is the same classification used. It is therefore quite impossible to get together a statement of expenditures

¹ House Document No. 438, Sixty-second Congress, Second Session, is the first statement of the kind. This was prepared by the President's Commission on Economy and Efficiency as of July 17, 1911. It was transmitted to Congress January 17, 1912, and ordered published.

which will show the cost of activities for the government as a whole.

The hopelessness of such endeavor and the need for data of a kind which will enable one to know what the government is doing and what is the cost of each kind of service rendered, led President Taft to request each department and office to analyze its expenditures for 1911 on a common basis. This will be completed shortly when it may be available. Under the supervision of the commission on economy and efficiency, each bureau and office was asked to make return on a form which would show for each organization unit and kind of work:

1. The character of expenditures, i. e., expenditures so classified as to show, cost of:
 - (a) Administration and other overhead charges.
 - (b) Expenses:
 - Operation.
 - Maintenance.
 - (c) Capital outlays (including payment of debt).
 - (d) Fixed charges (including pensions, interest, etc.).
 - (e) Contingencies and losses.
2. The method of financing, i. e., appropriation bills and character of grants under which expenditures were authorized.

The data thus obtained has enabled the commission not only to bring together the data of expenditures for the government as a whole, but to give a complete financial picture of the cost of:

- Work done, expressed in terms of organization.
- Work done, expressed in terms of character of expenditures.
- Work done, expressed in terms of methods of financing.
- Organization expressed in terms of character of expenditures.
- Organization expressed in terms of methods of financing.
- Character of expenditures expressed in terms of methods of financing—i. e., the method of financing current expenses, capital outlays, fixed charges, etc.

At the same time a complete analysis was made of appropriations for the year 1912 and of estimates for 1913. Such results, if presented currently, it is thought will enable members of congress, the President and heads of department to have before them the data

necessary to the consideration of every question of policy that may arise. Also if the accounts are kept in such manner as to bring the data before officers currently it is thought that they may be currently informed about what is going on, and watch the movements in the same manner as would the head of a great private corporation. To accomplish this, however, requires that all the accounts and current reports of the government be placed on a common basis—a work which necessarily will take much time and painstaking care. This means that practically every administrative process pertaining to the business of the government must be changed so that, instead of having a different system or technique in each accounting and disbursing office, there will be one general system or technique for the service.

Provisions Made for Obtaining Information About State Government and Minor Jurisdictions

About fifteen years ago a vigorous campaign was begun looking toward the better information of citizens and officers in states. This has been in a measure successful. In a large number of states, commissioners of accounts, public works commissions, state auditors, state controllers, and other offices have been created the purpose of which is to give intelligent consideration to this need. In 1902, the census bureau² made an inquiry that also included the cities, the result of which was to bring together this data on common lines. Illustration of the practical possibility of establishing a uniform classification based on the character of service rendered, may be found by reference to this report.

At the present time the data collected by the bureau of the census is of small value, not because it has not been carefully done, but because it does not include national expenditures and is not up to date. The last analysis of expenditures for states, and counties and minor civil subdivisions on common lines is for the year 1902, in other words, the information there is ten years old. Since that data an annual report has been made for cities but the last published report bringing together the data for cities is for the year 1908. This is too old to be of use for the purpose of giving to officers or to the people a perspective needed for thinking about any question of current business.

² Report on Wealth, Debt and Taxation.

Provisions Made for Obtaining Information About Municipalities

At large expense to the national government a staff has been maintained for currently collecting the financial statistics of cities from original sources. For this purpose the classification of the bureau which was used to tabulate the report of 1902 was much modified—the classification adopted by the National Municipal League being adopted instead. This provides for classifying expenditures by character as follows:

I. Municipal expenditures:

1. Expenses (administration, operation and maintenance).
2. Interest.
3. Capital outlays.³
4. Payments on account of debt.³
5. Refunds.
6. Sinking fund and other investments.³

II. Agency expenditures (county, state, etc.).

The same data were also classified in such manner as to show the character of service rendered or purpose under the following heads:

I. General expenses and special service expenses.

1. General government (overhead).
2. The protection of life, health and property.
3. Health conservation and sanitation.
4. Highways.
5. Charities, hospitals and corrections.
6. Education.
7. Recreation.
8. Miscellaneous.

II. Expenses of municipal service enterprises.

1. Heat and light systems (for service of city only).
2. Paving plants.
3. Repair shops.
4. Printing establishments.

III. Expenses of public service enterprises.

1. Water supply systems.
2. Electric Light and power systems.

³ The payment of debt and sinking fund installments would be sub-details of capital outlays under the commission classification referred to on p. 30.

3. Gas supply systems.
4. Markets and public schools.
5. Docks, wharves and landings.
6. Cemeteries and crematories.
7. Institutional industries.
8. All other enterprises.

The outline of general expenses as above set forth is further analyzed so as to show the content of each of the classes as for example, "general government" is so analyzed as to show: councils and legislative officers; chief executive offices, including the mayor's office and executive boards and commissions; finance offices and accounts including auditor or controller, treasurer or chamberlain, assessment of revenues, collections of revenue, other finance offices and accounts; general law offices; elections; courts, including general police or municipal, central municipal courts, superior courts, prosecuting attorney, sheriff or marshal; and general government buildings.

So too, "protection of life and property" is made to include: the police department; militia; fire department; miscellaneous inspection; and pounds. "Health conservation and sanitation" is made to include: the health department; quarantine and contagious disease hospitals; morgue; sewage and sewage disposal; street cleaning, and refuse disposal. The general caption "highways" covers general supervision; general street expenses; street pavements, sidewalks; bridges other than toll; snow and ice removal; street sprinkling; street lighting and miscellaneous. Under "charities, hospitals and corrections" are included: general supervision; poor in institutions; out-door poor relief; care of children and miscellaneous charities; hospitals; insane in institutions; prisons and reformatories. Under the caption "education" is placed: general administration and expenses; pensions and gratuities; elementary day schools; day high schools; normal schools and colleges; night schools; schools for special classes; contributions to schools maintained by other civil divisions; contributions to private schools; libraries; art galleries, museums. Under the caption "recreation" is placed: expenditures for parks and grounds; park police; zoological collections; play grounds; music in parks; trees in streets; baths and bathing beaches; celebrations and entertainments.

The Obvious Advantage to be Gained Through Coordination

The fact that these data had been assembled under common classification, that the inquiry reached to 159 cities, that it entailed the distribution of \$1,284,117,012 of expenditures, makes very clear that there are no practical difficulties that may not be readily surmounted. The practicability of adopting uniform categories of expenses for national, state and city government, so far as each of these might have expenditures of the classes adopted, is also evident from the results of the work of the President's commission.

Assuming that such a classification were adopted as a basis for current accounting and reporting, the utility is obvious. At the present time there is no means provided for obtaining these data in such form that they may be considered in perspective by congress, state legislatures, municipal councils or other policy-determining bodies. At the present time the American people are in the dark and the officer is laboring under a handicap which can be overcome by making available information as a basis for judgment.

Let us assume that the question of transportation facilities is to be considered. No one knows or has the means for finding out what transportation facilities are being provided by states, by municipalities, by minor subdivisions of states, and what by the government. The last report above referred to which provides this information for all the agencies other than the national government showed that about one hundred and sixteen millions of dollars was spent for highways, of which amount about twenty-three millions was spent for lighting, the balance being shown as other highway expenditures. This included streets of cities, the expenditures for which amounted to about twenty-six millions. The reported amount expended for good roads by states, as of that date, was \$4,679,976; by counties was \$28,521,545; by minor civil divisions other than cities \$34,615,587. Exactly what is comprehended in these expenditures and what were the expenditures for highways by the national government at this time is not known. The analysis which has been recently made by the commission shows expenditures by the national government for the promotion of transportation facilities as follows:

SUMMARY OF EXPENDITURES BY THE NATIONAL GOVERNMENT IN 1911 FOR
PROMOTION OF TRANSPORTATION AND COMMUNICATION OTHER
THAN POSTAL SERVICE

Promotion of navigation:

| | |
|--|-----------------|
| Providing charts, sailing directions, and the like | |
| Engineer Corps, Department of War..... | \$136,371.16 |
| Coast and Geodetic Survey, Department of Commerce and Labor..... | 883,585.26 |
| | <hr/> |
| Providing, maintaining and improving public facilities for navigation: | \$1,019,956.42 |
| Lights, buoys and other aids to navigation— Bureau of Lighthouses, Department of Commerce and Labor..... | \$5,582,328.22 |
| Officers of the Navy assigned to lighthouse duty..... | 80,438.75 |
| Officers of the Engineer Corps, War De- partment, assigned to lighthouse duty..... | 1,230.32 |
| | <hr/> |
| Total..... | 5,663,997.29 |
| Inland canals—Engineer Corps, War Department..... | 1,646,306.73 |
| Rivers and harbors—Engineer Corps, War Department... | 31,521,398.10 |
| Panama Canal— | |
| Isthmian Canal Commission..... | \$37,830,278.93 |
| Engineer Corps, War Department..... | 51,799.53 |
| | <hr/> |
| | 37,882,078.46 |
| Total..... | <hr/> |
| | \$76,713,780.58 |
| Rescue and relief of vessels in distress and of their seamen and passengers— | |
| Life Saving Service, Treasury Department... | \$2,398,487.95 |
| Navy Department..... | 50.00 |
| State Department..... | 16,023.82 |
| | <hr/> |
| | \$2,414,561.77 |
| Subsidies to steamship lines—Post Office Department | 185,862.46 |
| Other—International Congresses of Navigation, War De- partment..... | 8,738.92 |
| | <hr/> |
| Total..... | \$80,342,900.15 |

¹This sum does not include expenditures by the Hydrographic Office of the Navy Department for the preparation of charts and sailing directions for sale and free distribution, as the amount of such expenditures has not been separately ascertained.

²In addition, considerable sums are spent by the Revenue Cutter Service, Treasury Department, for the relief of vessels in distress (roughly estimated at about \$1,000,000), but such expenditures can not be separated from those made by the same service for other purposes.

| | |
|--|-------------------------------|
| Brought forward | \$80,342,900.15 |
| <i>Promotion of good road building</i> —Office of Public Roads, Department of Agriculture..... | 120,856.56 |
| <i>Improvement of railway operation</i> —International Railway Congress, Department of State..... | 400.00 |
| * <i>Construction, operation, and maintenance of telegraph and cable lines</i> —Signal Corps and Line of the Army, War Department..... | 277,082.36 |
| Grand total..... | <u><u>\$80,741,239.07</u></u> |

Between this data and that which is reported in the last report of the census bureau for all jurisdictions other than the national government, however, there is a gap of nine years, and there is such indefiniteness and lack of detail as to make the picture of very little practical use.

If each of the governmental agencies which has to do with the promotion of transportation facilities were required to adopt a common classification and form of report (as the government now requires of railroads), legislators, executive officers and the public might think and act with some intelligence about questions of policy relating to the subject. Having such common classification and common form of reporting the annual estimates and statements of expenditures placed before congress would not only reflect what the nation is doing or proposing to do but might also reflect what each state and city is doing and what each state and city is proposing to do.

Let us assume again that the provisions which should be made for the protection of public health form a subject which should be inquired into. The ten-years-old report of the bureau of census shows a total expenditure by governmental agencies other than the national government of \$9,460,520. Of this amount about \$4,289,825 was expended by cities; \$1,373,307 by states and territories; \$1,898,759 by counties and \$1,098,630 by minor civil divisions. The analysis of expenditures for the year 1911 for the national government which was made by the commission shows that through these agencies \$6,132,739.26 were expended for the protection of public health distributed as follows:

* These expenditures (for the Washington-Alaska telegraph and cable system) are largely for military purposes.

SUMMARY OF THE EXPENDITURES OF THE NATIONAL GOVERNMENT IN 1911
FOR PROMOTION AND PROTECTION OF THE PUBLIC HEALTH*Research:*

In pathology and medicine—

| | | |
|--|--------------|--------------|
| Public Health and Marine Hospital Service, Treasury Department..... | \$152,388.25 | |
| Several international associations, State Department..... | 21,934.60 | |
| | | \$174,322.85 |

| | | |
|---|--|-----------|
| In human nutrition—Office of Experiment Stations, Department of Agriculture..... | | 13,246.43 |
|---|--|-----------|

| | | |
|--|--|----------|
| In entomology as affecting public health—Bureau of Ento- mology, Department of Agriculture..... | | 2,859.70 |
|--|--|----------|

| | | |
|------------|--|--------------|
| Total..... | | \$190,428.98 |
|------------|--|--------------|

Relief of sick and injured:

Merchant seamen—

| | | |
|--|--------------|--------------|
| Public Health and Marine Hospital Service, Treasury Department..... | \$983,773.53 | |
| Hospital at Panama and Cape Town, State Department..... | 550.00 | |
| | | \$984,323.53 |

| | | |
|---|--|------------|
| Negroes—Freedmen's Hospital, Interior Department..... | | 139,855.57 |
|---|--|------------|

| | | |
|------------|--|----------------|
| Total..... | | \$1,124,179.10 |
|------------|--|----------------|

Control and improvement of food, drug, and water supply:

Control and improvement of production of—

| | | |
|---|----------------|----------------|
| Meat—Bureau of Animal Industry, Depart- ment of Agriculture..... | \$3,076,977.91 | |
| Renovated butter—Bureau of Animal Indus- try, Department of Agriculture..... | 14,116.10 | |
| Market milk—Bureau of Animal Industry, Department of Agriculture..... | 9,420.23 | |
| Farm and city water—Bureau of Plant In- dustry, Department of Agriculture..... | 324.01 | |
| | | \$3,100,838.25 |

Control of traffic in foods and drugs—

| | | |
|---|--------------|------------|
| Bureau of Chemistry, Department of Agri- culture..... | \$761,083.04 | |
| International Investigation of Opium Evil, State Department..... | 9,119.15 | |
| | | 770,202.19 |

| | | |
|------------|--|----------------|
| Total..... | | \$3,871,040.44 |
|------------|--|----------------|

| | | |
|---------------------|--|----------------|
| Amount forward..... | | \$5,185,648.52 |
|---------------------|--|----------------|

* Includes unimportant expenditures, not separately ascertained, for medical inspection of men of the life saving service and other government establishments.

| | |
|--|----------------|
| Brought forward..... | \$5,185,648.52 |
| <i>Prevention and eradication of contagious diseases:</i> | |
| Maintenance of National quarantine—Public Health and Marine Hospital Service, Treasury Department..... | \$477,254.33 |
| Preventing spread of epidemics—Public Health and Marine Hospital Service, Treasury Department..... | 307,606.37 |
| Immigrant inspection—Public Health and Marine Hospital Service, Treasury Department.. | 162,722.83 |
| Total..... | 947,583.53 |
| Grand total..... | \$6,133,232.05 |

This does not include the amount expended by the national government for the medical care of commissioned and enlisted men in the army, the navy, and the marine corps, which reaches a total of \$8,035,802.71 in addition.⁸ Although there is a gap of nine years between the figures shown by the census bureau report for cities, states, counties, and other local agencies, by comparison it is evident that the national government is one of the large factors in the problem of health conservation and necessarily must be. In handling this problem, however, all officers and the people in their thinking about the work of the government must labor at a disadvantage until more definite and up-to-date information is made currently available.

The subject of the administration of justice is a subject of immediate concern. It is evident that in this the local jurisdictions must always be an important factor. The returns by the census bureau above referred to show that the cost for courts other than federal was \$39,934,903. This was distributed as follows:

| | |
|--------------------------------------|--------------|
| State and territorial courts..... | \$10,428,931 |
| County courts..... | 21,178,396 |
| City courts..... | 6,211,187 |
| Courts of minor civil divisions..... | 5,165,550 |

This does not include the law officers of state and local jurisdictions on account of which there were expended \$7,196,691. To this must be added the cost of federal courts. For the year 1911 the analysis shows that the cost of federal courts was \$5,036,566. While

⁸ Not including \$6,027,421.51 expended for conducting old soldiers' and sailors' homes which also maintain hospital wards and dispensaries.

the jurisdiction of the federal courts and state courts is established by constitutional law, nevertheless, the intimate relation of courts to subjects of public welfare is one which would make it of advantage at all times to have before the people such data as may indicate the operation of courts within the different jurisdictions and one of the means of getting to the facts bearing on questions of welfare is through financial statements and in consideration of appropriations. The fact that one jurisdiction or another is established by constitutional law is no reason why, if need be, constitutions may not be amended and the whole machinery of adjudication changed to adapt it best to the protection of the individual.

What is the expense of law making is one of special interest. What does it cost to make our laws, and is the public getting the information to which it is entitled? Our ten-year-old data show that the cost of legislation other than national was \$7,301,063. Of this \$4,689,914 was the cost of state legislation. The cost of national legislation as shown by the recent analysis for 1911 was \$11,073,660. Assuming that up-to-date current information were at all times available and that statements of fact contained such analysis as would indicate the cost of various kinds of agencies employed as in legislation, such as the cost of special commissions, legislative reference bureaus, legislative counsels, salaries of legislators, mileage, etc., these facts might have an important bearing on the subject in constitution making, as well as in statutory organic acts and more especially in gaining for measures which are intended to make legislators more efficient, the popular support required.

All of the items indicated in outlines of the classification and in standard forms of reports should be subjects of primary concern to the people—subjects to which the energies of government are directed and to which public officers are giving their best thought and energy. To become efficient, however, to accomplish such results as will gain public support for government enterprise, requires that there be such an assembling of data as will enable not only the various organs of publicity and the agencies through which public opinion is expressed to keep in touch with live facts of government, but such as will enable persons in position of official responsibility in the many governmental agencies to come into close co-operation; the desideratum would be to enable the national, state and municipal agencies to work hand in hand for the welfare of the people.

PART TWO

Efficiency Principles Applied

EFFICIENCY THROUGH ACCOUNTING

BY WILLIAM A. PRENDERGAST,
Comptroller of the City of New York.

Efficiency is applied common sense in any field of human activity or endeavor from catching fish to governing a nation. The essential quality is and must always be the same. The American Society for Promoting Efficiency says: "Efficiency is the ratio of result obtained relative to the amount of expenditure in obtaining it." This definition describes not efficiency but the measure of efficiency. The quality itself cannot become the proprietary possession of a group of expert theorists. The word should not be permitted to have a technical meaning.

Efficiency in municipal administration means doing the things which the citizens of the municipality want done as well as possible at the smallest possible expense. The question of accounting is of great import in accomplishing this result, and the statements in this article are based upon the experience of the City of New York.

The best possible system of accounting cannot produce efficient administration of municipal affairs. On the other hand, efficient administration of municipal affairs is impossible without an adequate system of accounting to control municipal operations. The people of a community decide for themselves what they want done by their government. They tell the men whom they elect to public office and these men control the operations of government in such a way as to accomplish the things the people want. To enable these men to direct the activities of government intelligently and economically, it is essential that they should have constantly before them the facts and figures bearing upon current operations. It is only through proper accounting methods that these facts can be had.

Under the Greater New York Charter the Board of Estimate and Apportionment constitutes what would ordinarily be termed the Board of Directors of the municipal corporation. The comptroller of the city is the fiscal officer of the corporation, and, *ex officio*, the financial adviser of the Board of Estimate. The comptroller is also the chief accountant of the city. Under the charter

he prescribes accounting forms for all municipal activities. The practical results which have been obtained, and which will be obtained from the installation of proper accounting methods, can best be illustrated by the consideration of a few of the larger advantages which have been brought about within the period of four or five years since the City of New York began to give its attention to the problem of producing greater efficiency in the government.

The most important single duty of the Board of Estimate and Apportionment is to prepare the annual tax budget. This budget constitutes the plan of operation of the city for the ensuing year, and provides the money needed for the maintenance of that plan, apportioning the total amount appropriated to the different city departments for the carrying out of the almost innumerable functions of city government.

It was not until the year 1909 that any real effort was made to obtain a financial control of the expenditures contemplated in the budget. Since that time there has been an increasing effort and a constant improvement in the accounting methods used to obtain this control. The beneficial results of these improved methods have been very clearly demonstrated. As far back as 1906 the comptroller of the city realized in a measure the inadequacy of the information upon which the Board of Estimate was making its annual appropriations. He was instrumental in securing an amendment to the charter, whereby the Bureau of Municipal Investigations and Statistics in the Department of Finance was created. That bureau is empowered to gather such statistics as may be needed, not only in the work of budget making but in all fields of city activity. The Bureau of Investigations did its first effective budget making work in the year 1907. A partial attempt was made that year to show the purpose of each appropriation in the budget. Until that time the titles of appropriations had been without meaning and money appropriated had been used in many instances for purposes other than those covered by the titles of the appropriations.

In 1908 the Bureau of Investigations tried to obtain from the different city departments information upon which the Board of Estimate might determine intelligently the amount of money which would be required for the maintenance of the departments for the following year. It was found almost impossible to get such information. There was no uniformity in the classifications used by the

various departments. To remedy the situation a form for departmental estimates was prepared. This form was designed to elicit from each department the information which was then considered necessary. Each department was required to give the data of classified expenditures for previous years. The facts and figures thus collected made it possible for the budget makers to exercise for the first time an intelligent judgment in determining the necessity of previous appropriations and the amounts necessary for 1909 appropriations for the same purposes. The budget for 1909 was the first in the history of the city based upon departmental experience. It was also the first budget which gave to the Board of Estimate anything approaching a financial control of departmental operations for subsequent years. It marked the greatest step forward toward efficient administration in the history of the city.

In order that the city might gain the full advantage of the information obtained through this system of accounting, the Board of Estimate and Apportionment adopted certain rules of procedure. These rules have been amended and approved from year to year since that time. The rules first adopted were briefly these:

1. All employees receiving per annum salaries and paid entirely out of tax levy funds were shown in schedules giving the title, rate of compensation and the number of incumbents.
2. Employees receiving other than per annum compensation were scheduled by title and with a lump sum appropriation for each class of labor.
3. A resolution in the budget limited monthly expenditures against appropriations for per annum employees to a monthly rate of one-twelfth of the schedule line allowance.
4. All budget appropriations were given serial code numbers.
5. A uniform classification of expenditures was adopted as far as was possible at that time.
6. Any change in a schedule of "Salaries" and "Salaries and Wages" was forbidden except when authorized by twelve votes of the Board of Estimate and Apportionment.

Although the budget for the year 1909 was a great improvement over those of previous years, it was far from satisfactory, and the Board of Estimate and Apportionment found it very difficult of administration. Strong opposition to the enforcement of the budget

resolutions was encountered in the departments. The appropriations for salaries and wages fluctuated so widely during the year that uniform control was impossible. New forms were designed calling for much more elaborate information from the departments than that given in the previous forms. Departments were required to furnish full data regarding actual pay roll expenditures, monthly, semi-monthly and weekly, for a period of eighteen months during 1908 and 1909, with semi-annual recapitulations of these expenditures.

In the budget for 1910 the classification of expenditures for salaries and wages was carried out to a considerably greater extent than in that of the previous year. The results obtained fully justified the extra labor involved in the preparation of the budget.

Still further improvement was made in the tax budget for 1911. The 1910 budget had worked in a fairly satisfactory manner. This was especially true of the salary appropriations. Such full information had been before the Board of Estimate on the administration of salaries and wages throughout the city departments that it was not considered necessary to require the same exhaustive details of salary expenditures from the departments for the ensuing year. The Board of Estimate and Apportionment had ample information regarding the services of all employees that were paid on the annual salary basis.

The most striking advance made in the 1911 budget in the field of obtaining information in regard to payment for services was to require from all city departments schedules showing expenditures in what are known as wage appropriations, that is, pay roll expenditures for employees paid at other than annual rates. These schedules show first, each class of labor; second, each rate of compensation within each class of labor; and third, the number of days of employment.

The information thus obtained enabled the Board of Estimate and Apportionment to extend control over wage appropriations. In the 1911 budget appropriations were made for wages of employees under definite title at a definite rate of compensation, for a definite number of working days. This was necessary because some employees work every day in the year, some work every day except Sundays and holidays, some every day except Sundays, holidays and Saturday afternoons, and some for fractional parts of the year. Further differentiation was made between regular em-

ployees and temporary employees. A rough attempt was made to extend the system of control over employees whose compensation was paid only partly out of tax levy funds. No uniformity of control was attained over this class.

The principle of restricting monthly expenditures to one-twelfth of the total appropriation, which had been established in 1908 over annual salary appropriations, was extended to the appropriations for wages. The resolutions accompanying the 1911 budget provided:

1. That no transfers shall be made from appropriations or schedules of "Salaries," or "Salaries, Regular Employees," to any other appropriation or schedule than "Salaries," or "Salaries, Regular Employees."

2. That no transfers shall be made from appropriations or schedules of "Salaries, Temporary Employees," to any other appropriation or schedule than "Salaries, Temporary Employees."

3. That no transfers shall be made from appropriations or schedules of "Wages, Regular Employees," to any other appropriation or schedule than "Wages, Regular Employees."

4. That no transfers shall be made from appropriations or schedules of "Wages, Temporary Employees," to any other appropriation or schedule than "Wages, Temporary Employees."

5. That no transfers shall be made from appropriations or schedules of "Compensation, Temporary Employees," to any other appropriation or schedule than "Compensation, Temporary Employees."

6. That no transfers shall be made from any of the appropriations made herein for the various kinds of supplies and contingencies to any other than to supply or contingency accounts.

These resolutions had the effect of returning to the general fund large balances of appropriations which, under the rules governing previous budgets, would have been consumed in the different departments during the closing months of the year.

In the old days it was not unusual, in the event of the existence of a surplus in the salary account of a department at the close of the year, for favored employees, at salaries ranging from \$1,000 to \$2,500 a year, to be placed upon salaries ranging from \$10,000 to \$25,000 a year for the months of November and December.

The following quotation from the official records of the Department of Finance may prove of interest. Names are omitted for obvious reasons.

"December 31, 1895.

"First Auditor of Accounts:

"DEAR SIR:—The Comptroller has designated and fixed the salaries of the persons hereinafter mentioned for the month of December, 1895, at the following amounts:

(Office designated) \$1,583.37, or at the rate of \$18,500 a year. (This employee was on a salary of \$5,000 a year.)
 (Office designated) \$625.00, or at the rate of \$7,500 a year. (This employee was on a salary of \$2,500 a year.)"

Many other employees are mentioned by name, with substantial increases in salaries, for the month of December. Until the adoption of the schedule system there was no check against this form of favoritism shown to employees in all city departments.

Another very important feature of the 1911 budget was that it included no appropriations for any position or grade of position not established according to law under Section 56 of the Greater New York Charter. Section 56 provides the method by which positions in the city service and salaries for these positions are established. Recommendations are made by the Board of Estimate and Apportionment and the positions and salaries fixed by the Board of Aldermen. Up to this time hundreds of positions had been occupied and the incumbents had drawn salaries, although the positions had no legal existence.

In the making of the tax budget for 1912 the Board of Estimate preserved all that was good in the previous budgets and endeavored to accomplish two very important objects that had not been attained by the previous budgets. These objects were:

1. To complete the schedulizing of all employees of the City of New York, regardless of the funds from which they were paid, whether entirely from the tax levy, or partly from corporate stock, special and trust fund, or revenue bond fund, or entirely from all or any of these sources.
2. To extend to appropriations for supplies and materials the same system of accounting control which had proved so effective in the salary and wage appropriations.

Analytical information similar in character to that previously required regarding salaries and wages was required from the departments in regard to previous expenditures for supplies and materials. The results achieved almost entirely through improved accounting methods, as applied to budget making by the Board of Estimate, during the period from 1909 to 1912, inclusive, may be set down as follows:

1. Complete control over every employee paid out of city funds, regardless of whether they are derived from taxes, corporate stock proceeds, or other sources. This is accomplished by schedules for all salary and wage accounts.
2. Complete control over all appropriations for supplies, materials, contingencies and other purposes besides personal service.
3. A clear and definite statement of the purpose of each appropriation in the budget.
4. Prevention of the use of the appropriation for any purpose other than that for which the appropriation was originally made.
5. Prevention of the use of corporate stock proceeds for the expenses of administration, operation and maintenance.
6. Prevention of the old practice of decreasing the number of employees and using the amounts released by such decreases to increase salaries or wages of other favorite employees.
7. Prevention of the old practice of wasting balances at the end of the year, instead of leaving these balances to be transferred to the general fund.
8. Prevention of the practice of using up all the appropriation in the first few months of the year, thereby necessitating the issue of revenue bonds for purposes fully cared for in the original budget appropriation.
9. Prevention of a violation of the law which provides that no obligation shall be incurred beyond the amount of the available appropriations.
10. Prevention of the practice of impairing the efficiency of funds by running at a low rate of expenditure for several months of the year to save money to raise salaries and increase the force for the last month of the year with the object of forcing the Board of Estimate and Apportionment to make up the next year's budget on the basis of these abnormal increases.

11. The elimination of the theory that all appropriations were to be regarded by the department heads as their personal property, to be used as they pleased.

12. A uniform classification of appropriation accounts with a view to making the audit of pay rolls and vouchers easy and effective.

13. Abolishment of the old practice of paying large salaries to political favorites out of corporate stock appropriations, which hitherto were unscheduled.

14. Prevention of the employment of any person payable out of the city's funds without the express approval of the Board of Estimate and Apportionment in the form of a salary or wage schedule.

15. Abolishment of the practice of employing persons in positions not legally established, as required by Section 56 of the Greater New York Charter.

In addition to the great improvement in the public service which has taken place during the period mentioned, it is significant that, for the year 1908, before the schedule regulations of the Board of Estimate and Apportionment went into effect, the accrued balances of salary and wage appropriations returned to the general fund for the reduction of taxation, amounted to \$314,760.76. For 1909, when there was an enforcement of partial regulations, there was returned to the general fund, from the same source, \$1,081,748.34. For the year 1910, when the regulations governing salaries and wages had become fully operative, there was returned from this source to the general fund, \$1,958,730.67. When the budget for 1911 was prepared the schedule plan had demonstrated that economies could be effected. It was determined to reduce the budget and the Board of Estimate and Apportionment adopted a resolution calling upon all city departments to reduce the estimates of the previous year by ten per cent. In some of the departments this reduction was effected. As a result of the resolution, however, a large cut was made in the salary appropriations for most of the departments. Because of this fact, and the fuller information in the possession of the Board of Estimate and Apportionment, when the budget was made, salary accruals returned to the general fund from 1911 appropriations amounted to less than the previous year. The total was \$1,391,185.26.

The foregoing plan has proved so successful that similar sched-

ules are now being adopted for every corporate stock fund, special revenue bond fund, or special and trust fund. In this way the control of the Board of Estimate and Apportionment over salary and wage expenditures is complete.

The next step will be a full inquiry into the nature and quality of services given by city employees in the various departments and offices, with the purpose of establishing standard rates of payment for similar quality and quantity of work in all departments. The Board of Estimate and Apportionment has already appointed a committee to carry out this inquiry.

The ultimate purpose of the Board of Estimate to establish accounting control through the schedule and cost system over all current expenditures of city money, is in the way toward early realization.

In all probability the budget for next year will be accompanied by a cross reference complementary budget, which will set forth the expenditures of the city by functions, that is, the respective amounts to be spent for public health, education, safety, etc.

Among the duties of the Board of Estimate, second only in importance to the making of the annual tax budget, is the spending of the money of the city for permanent improvements. Money spent for the permanent improvement of the city is obtained by the sale of long-time securities known as corporate stock. Authority for such expenditures can be given only by the Board of Estimate and Apportionment and the Board of Aldermen. In 1910, the first year of the present administration in New York City, the Board of Estimate determined upon a fixed policy of treating such expenditures in a manner as closely similar to that employed in the making of the annual tax budget as the nature of the case would permit. It resolved upon the adoption of an annual "corporate stock budget."

In previous years authorizations of corporate stock, carrying many millions of dollars, were made for unnecessary purposes. Since the adoption of the budget system of dealing with authorizations, the Board has applied the same analytical methods of testing the applications of the different departments and offices as it uses in preparing the tax budget. It is now the practice to authorize corporate stock for specific improvements only and to limit the amount of each authorization. Whenever possible, the appropriation is segregated into amounts to be used for the parts of the general

work to be done. A very careful analysis has been made of existing authorizations for the sale of corporate stock, with the result that the authorizations of many millions of dollars have been rescinded, the purposes for which they were granted being regarded as unnecessary or unwise.

The Board of Estimate requires that all plans, specifications, estimates of cost and contracts for work payable out of corporate stock shall be approved by the Board of Estimate upon the recommendation of the comptroller. This form of accounting control has already resulted in the saving of many hundreds of thousands of dollars during the brief period it has been in operation. This scrutiny by the Board of Estimate of the method of expending money derived from the sale of corporate stock has resulted in a general demand for the adoption of standard plans wherever such standard plans are applicable. Standard contract forms are already in use in the employment of architects by the city for the purchase of coal and forage. Similar forms of contracts in other fields are in process of preparation.

The consideration of the application of analytical accounting methods to the purchase of supplies is the basis for the work now being done under the direction of the Board of Estimate and Apportionment by the Committee on the Standardization of Supplies.

In one aspect this effort to standardize supplies and establish purchases on a schedule cost basis is properly to be considered a form of accounting. Its essential quality is adequate accounting control.

The general subject of standardization and codification of supplies is, however, so large in its scope that it cannot be treated satisfactorily in an article of this character. New York City spends annually for supplies between twenty millions and twenty-five millions of dollars. The list of articles now under consideration by the Committee on the Standardization of Supplies comprises more than fifty thousand line items. Standard specifications for about one-third of these articles have already been prepared.

In order to supplement the work done by the Board of Estimate and Apportionment in the matter of appropriations, it is necessary that there should be available at all times a current report, which shall show as clearly and succinctly as possible what is being done from day to day with the city money. The effort to provide such a report has taken concrete shape in the installation of the so-called

new accounting system. The first purpose of this system is to give accurate periodical information to the city authorities, through the comptroller's office, regarding all financial transactions of the city government. The second purpose is to provide a means of preventing illegal or improper expenditure of the city money. Every large corporation and business house has a similar system of accounting control, modified by the difference in the character of its transactions. Experience has shown that, in the larger and more complex business affairs, such an accounting control is absolutely essential to efficiency. When the accounting system is fully installed in all the city departments, uniform methods of recording transactions and of reporting them will be in force throughout the city; through the establishment of stores and expense accounts now in process of formulation and installation, figures will be instantly available, showing the actual expenses of all classes of service and all classes of supplies.

As a necessary preliminary for the establishment of correct opening balances in the city's new general ledger covering the fifteen thousand accounts on the books of the Department of Finance, a reconciliation was undertaken of the records in that Department with those in the one hundred and thirty outside departments, bureaus and offices. Already this has resulted in the transfer of almost ten millions of dollars to the general fund for the reduction of taxation.

That amount was found in open appropriation and fund accounts not needed for the liquidation of liabilities for maintenance and operation in the years for which the appropriations were originally made. In consequence, the 1912 tax rate is about twelve cents lower on the one hundred dollars of valuation than it otherwise would have been. The writing off of these unencumbered balances, which had been deferred for about twelve years, principally because of the inertia of the past administrations, had also resulted in removing from the books of the city over five thousand inactive accounts, thus reducing the amount of accounting and reporting necessary to be done in connection with these accounts.

A current reconciliation has now been installed based upon the monthly checking of the accounts in the administrative departments with the controlling accounts in the Department of Finance.

Much has been said and written, especially in very recent times, regarding the value of the periodical balance sheet. The

purpose of the balance sheet is to set forth the financial condition of a business enterprise or a municipal corporation at a given date. It is a statement of assets and liabilities. In the case of the municipality the resultant balance would show at any time the condition of the public trust with respect to its current assets and liabilities, and would indicate whether there was a surplus available for lessening a succeeding year's tax levy, or a deficiency which would have to be provided for. Such a balance sheet will be one of the principal features of the general ledger now being set up in the Department of Finance of New York City.

The general ledger will be at the same time a periodical report of all the financial transactions of the city and a proof of the full accounting control over those transactions.

It is equally important that there shall be periodical statements of revenue and expense correlated with receipt of revenue and disbursement of authorized expenditure. Such a statement should include elements which do not appear on the balance sheet, such elements as moneys borrowed on short time loans to meet current administrative expense, the amounts collected from various sources, and the like.

The difference between accounting as a factor in efficiency, without a study of the conditions under which the accounts are to be operative, as compared with the results which are obtained by a method separate from accounting, is shown in my experience with the disbursement side of the audit in the Department of Finance.

The new form of accounting has been in operation in that office for two years. Under the organization which prevailed six months ago, the average interval from the presentation of a voucher for payment until the warrant in liquidation of that voucher was ready, approximated nine days. Without any change in the system of accounts or in the personnel of the force, but by a rearrangement of the work and the introduction of one or two simple labor saving devices, I feel sure that within the next six months we will be able to pay a majority of the city's claims within three days, and most of them within five days of their receipt in the hands of the Auditor of Disbursements of the Department of Finance.

I found, for instance, that the auditors were using three-quarters of their time, not in the work of audit, but in making calculations and extensions and in writing warrants. Without increasing the

clerical force in the audit room, I rearranged the work so that one staff of clerks did nothing but write warrants, another staff devoted themselves exclusively to calculations and extensions, leaving to the auditor the work properly belonging to his title. Two results were accomplished at once by this change. First, all the work in the audit room was cleared in a day, where heretofore vouchers would be delayed two or three days. Second, the proper segregation of the work showed that the audit could easily be done by ten auditors, where sixteen auditors had heretofore been used, and the actual number of hours available for audit by these ten auditors is considerably more than the sixteen auditors could devote to audit under the old system. Six men are now employed in writing the warrants, under the segregation previously referred to. Two typewriting operators are now wholly engaged in writing warrant schedules. I have in mind the use of a typewriting machine which will permit the two typewriting operators to write the warrants at the same time the schedules are written. Thus the six men now engaged in writing warrants will be released for other work in the department, and the department work at the same time expedited.

In the room of the Auditor of Disbursements, the vouchers, when received, had to pass from hand to hand among the accountants for a whole day before they were finally registered and ready for inspection, or for the engineers or for the audit. My labor saving device here is a set of three typewriting machines, the operators of which will transcribe from the vouchers, when received, all the necessary accounting information on slips in quadruplicate, which will be distributed to the various accountants, thereby allowing the voucher to progress at once for the further steps in audit instead of being delayed for a day as at present. In addition, a proof will be set up on one of the machines which will prove the accuracy of the registration, also give us our daily proof and prepare our fund report for the general ledger. This proof and reporting now takes the time of six men. Three typewriting operators will do that work, besides cutting off practically one day from the time of audit and also largely increasing the efficiency of all clerks working on our accounts.

The clerks working on accounts heretofore have posted from the vouchers, carrying them from book to book. Sometimes three or four men would be waiting their turn to make their postings in a given book. By the use of the posting slips a set of books may be

assigned to one man who will make all the entries in those books without the former confusion and waste of time. A posting clerk, under this system, should easily do twice more work than under the system previously in use.

In order to obtain efficiency through accounting, it is necessary to introduce recording methods that will reflect accurately the conditions of a municipal or private business. It is equally important to conduct the accounting in a manner that will secure from each person whose services are used, the largest possible product of intelligent labor, and, whenever possible, to introduce such mechanical elements as will insure speedy work and a conservation of human activity.

Accounting control such as that now being established in the City of New York, such as that which the United States Government on an even larger scale is attempting to establish in Washington, can never produce efficiency in government. It cannot furnish the elements of intelligence and energy which are the essentials of efficiency. It can and does, however, expose inefficiency, guard against dishonesty and clear the way for efficiency.

RESULTS OBTAINABLE THROUGH REORGANIZATION OF ACCOUNTING METHODS

BY B. J. TAUSSIG,
Comptroller of the City of St. Louis.

To the citizen who has occasion to deal with a municipal department, the administrative procedure to which he must conform appears unnecessarily complex. This impression is shared by the municipal official newly elected to office, who is at once confronted with obstacles in the way of his desire to administer his office as he would administer a private enterprise.

There are necessarily many causes which contribute to this condition of affairs. They will not be considered here, for there is no need to demonstrate the obvious. It is sufficient to say that municipal procedure of to-day is the result of an attempt to conform to the requirements of the law on the one hand and on the other to the practical necessity of getting work done. That it has been necessary to do this work through the agency of men appointed for other reasons than business efficiency, affords sufficient explanation of the situation which must be met by those who are concerned with the introduction of business methods in the conduct of municipal affairs. In the same connection, however, it is but fair to recognize that the lack of effective civil service provisions and the consequent insecure tenure of office are important contributing causes to the situation.

The problem has been approached from various viewpoints. The favored method has been that of what is termed "charter-revision." The results have usually been disappointing, because in most cases changes in charters have been made without adequate consideration of existing organization and procedure, which, whatever its defects, furnishes the essential evidence of the real needs of the situation. It is only natural that this should be so. We must clearly recognize the fact that law, as enacted by the legislative bodies and expounded by the courts, is frequently a pace behind the practical requirements of business, whether private or public. "Trade customs" are evolved from the necessities of busi-

ness, and after their worth has been demonstrated in practice, legislatures will adopt them, and eventually the courts will sanction them. Existing procedure, like trade custom, affords the logical point of approach for the person who is concerned with the reorganization of municipal procedure or the revision of charters, although, like trade custom, it may be used as a cloak for those who are violating either statutory requirements or adopted standards of business morality. In short, we must first make a diagnosis; determine what is being done, how it is done, and who does it, and consider the facts thus disclosed in their relation to legal requirements. The result will inevitably show that, while the procedure itself is defective when compared with the standards of private business, its shortcomings are partly due to inappropriate or antiquated legal requirements. With these facts as a basis, we may then propose a remedy with the conviction that our plan of reorganization must stand the test of practical working, since it has been based upon a thorough knowledge of practical needs; and, it matters not whether the proposed remedy contemplates reorganization of administrative or accounting methods merely, or charter revision involving changes in organization or in the nature and distribution of authority and responsibility.

It should be stated at the outset that a reorganization of accounting methods of a municipality is not merely an attempt to reform the city's system of bookkeeping. Accounting cannot be considered apart from organization, administration and performance. In order that the evidence shown by accounts may be properly interpreted, there must be means of determining standards of merit in goods and services, and there should be provision for certification and approval by responsible officials, based, if necessary, upon similar endorsement by responsible agents who know the facts in each particular case, and are qualified to pass judgment upon them.

It should be said, also, that the reorganization of municipal accounts is attended with difficulties which do not arise in reorganizing the work of private corporations. After a practical system has been devised, there is likely to be more or less difficulty in obtaining legal authority to effect changes in organization and in the distribution of functions as between related departments. There is certain to be opposition among the municipal employees who are required to conform to the provisions of any new system. The exist-

ing procedure in many cases represents the response of legislative bodies to appeals to some personal interests. The resistance to a change of method, therefore, is frequently inspired by the fear that the information procured by a new system would reflect on the integrity or efficiency of the managers. The system devised for a municipality, as well as that for a private corporation, though the object may be stated in the reverse order of importance, should be knave proof as well as fool proof.

Not a little of the confusion which exists in municipal accounting is due to the fact that there has been no single point of view from which the subject might be approached. It is true that we have had chief accounting officials with more or less authority to prescribe forms and methods, but "conflicting systems" have been allowed to develop in the various branches or departments. The chief accounting official has been dominated by the necessity of conforming to law and of accounting for the disbursements of the appropriation funds, with too little concern as to the manner in which appropriations are made, and as to the evidence upon which disbursements are made.

The heads of administrative departments have not been concerned with the form of the ordinances of appropriation, nor with the preparation and submission of evidence necessary as a basis for audit, except as this was necessary to relieve them of responsibility for the handling of funds. Their chief interest has been, and is, technical, and as a result their systems of procedure tend to reflect such facts as are thought to be of greater service in the particular department.

The public, however, is concerned chiefly with public service in relation to cost.

Recognizing the necessity of presenting statements of services in relation to cost, the municipal accountant is adopting actual accounting methods; employing accounts which represent "revenues" and "costs." This marks a departure from the traditional municipal method of accounting primarily for "receipts" and "disbursements." The cost basis will serve the interests of the administrative official. It will also enable the chief accounting officer to compare costs as between various departments. With statements presenting such data, department heads will be better prepared to approach the appropriating body and defend their budgetary estimates. This

would make it possible for the appropriating body to challenge specific items, not with reference to the corresponding items in the budget of the previous year, but with the corresponding item in other departments where similar services are performed. This method makes every item subject to challenge upon the basis of fact, and an item once allowed may not be necessarily continued simply because of the sanction of tradition. In other words, the cost basis puts the burden of proof upon the official submitting the estimate and not upon the member of the appropriating authority who wishes to challenge an estimate. It is not difficult for anyone familiar with the budgetary method to recall instances where questionable items have been passed by without challenge simply because the information necessary to raise the question on that particular point was not available. Cost basis requires presentation of estimates upon the basis of results rather than upon the basis of expenditures, thus providing a test of efficiency.

To measure the efficiency of services, adequate time reports with proper certification and approval are required. Forms of this kind put a check upon one of the greatest causes of waste and set up standards of labor and efficiency which automatically separate the workers from those who cannot or will not perform the service due, demanded and paid for. However, in the introduction of such records care must be exercised not to require reports in such detail from employees engaged in general duties so that the required statement of their work would become more irksome to them than its actual performance. While gross extravagance has existed in the employment of ordinary common labor on city work, and it is imperative that the actual service rendered by the large number of employees of that class should be reported, this should be through the medium of group or gang reports, submitted by overseers who can testify thereto of their own knowledge, instead of requiring the laborers to prepare reports. Individual reports cannot be secured in these cases for the reason that the mere mechanical act of writing is more of an effort to the ordinary workman than his usual form of manual labor. The detailed reports should be assembled in work-records which can be brought into agreement with pay rolls, and which can be made to furnish the essential information required for effective administration.

The fact that city property has been subject on occasions to

surreptitious abstractions demands a controlled property inventory which establishes responsibility for its care. A few years ago, a city set of standard weights and measures disappeared in the removal of an office from one side of the city hall to another. In that same city a dredge was stolen from the water front, and it was only after a considerable period that the fact became known. In the case of materials and supplies, and work performed for the city by others than those in the municipal service, the requirement of acceptable evidence of delivery of specified quality and quantity, eliminates a large part of the waste in the purchasing end of the city's business. That it discourages fraud and collusion goes without saying. Stores accounts and reports of materials used are the natural sequences to the purchase records, and complete the data required to determine the economy of purchases. The important fact remains that the data of true costs are generally lacking in municipal accounting. Pending the introduction of a comprehensive cost system, it is necessary, in order to exercise judgment regarding current requirements, to take advantage of the information contained in the appropriation accounts, because these accounts can be analyzed, revised, and uniformly classified much more expeditiously than a cost system can be fully installed in an organization where there exist the limitations of the personal element already referred to.

The difficulty of transacting private business with the city is generally recognized. An applicant for a permit to do a certain kind of work which is to be supervised by representatives of the city, or for which a fee is required, should not be delayed unnecessarily by the details of procedure. The filing of applications and securing of permits for the several classes of building, sewer, street, or other work to be performed by private individuals can be expedited by centralizing these functions. Fees, licenses, or charges for municipal service frequently accrue in such a manner that the determination of the amount of a charge rests largely with the individual who must record and report it. Detailed audit of the accounts would eventually disclose inaccuracies or fraud in such a case, but, as a current safeguard, financial stationery should be used for the value of which individuals can be held definitely responsible. The financial stationery which has been used by the City of St. Louis in the billing of property taxes has been under fair control. The introduction of distinctive municipal stationery and the simultaneous registering

and billing of taxes will afford complete control over this class of revenue, and will facilitate the service to the public. In the matter of water licenses, as the term is used in St. Louis, the various rates and methods established by ordinance would require an unwieldy plan and an extraordinarily large force in an effort to establish the same kind of proof in the aggregate which could be used if there were but one or even a few different rates. The plan which has been adopted, however, contains the assurance of a complete accounting for the total amount charged either through collections or through satisfactorily approved rebates. Variations in the revenue are easily determined, and the clerk of each collection district can be held responsible for the value of the licenses until payment thereof has been received by cashiers. The plan provides also for the preparation at one writing of the several documents which are required for issue to the public and for accounting purposes.

In fact, in establishing the methods relating to all of the revenues of the city, as well as those relating to the expenditures, there has been in mind the necessity for a procedure which would not only establish individual responsibility and verify the correctness of the financial returns and the reports made by the officials of departments, but would tend in every way possible to facilitate the public's transaction of business with the city. Methods based on the convenience of the clerks of a department must give way to those designed first to make it easier for the people to transact their business and in less time. For instance, the water licenses referred to should be prepared in advance of the time when the consumer calls to make his payment of the assessment, not while he stands around waiting for it. Instead of being a matter of half an hour, it should be one of two or three minutes at most. Instead of each of several window clerks having to perform all the functions necessary to assessing the tax, making out a license, and running a ledger, the several duties should be performed by clerks assigned to a particular operation only.

Uniformity in accounting methods and documents, as between departments, facilitates comparisons of revenue as well as of costs of like or similar services. As an administrative by-product, it makes it possible to shift employees from task to task, or even from department to department without loss of effort. That puts the emphasis upon that sort of procedure which is based upon present needs rather than the memory of past methods. Under the new

system, the "old man with a memory" gives way to the man of any age who can follow instructions.

The authority for the work of reorganization which we are now conducting in St. Louis was contained in a special ordinance passed by our municipal assembly early last year. However, the business administration of cities has been attracting so much attention and there is such a demand for those qualified to render the kind of service necessary that we were unable to commence revision until late in the year. It was necessary to secure men not only equipped as accountants, but as municipal experts. From the outset we have had the hearty co-operation of the mayor and most of the administrative heads of departments.

Care is being exercised to guard against creating such a cumbersome or elaborate method that a large expenditure of funds would be required to operate it. In certain respects reorganization has been somewhat a slow process through the necessity of taking care of current affairs under old methods. The detailed inquiry demanded by conditions disclosed in our original general investigation of departmental methods has been another cause for diverting services which it would have been preferable to keep strictly employed on constructive work.

Much of the material which is accumulated in the progress of the work at this time will be of value for future comparisons. There is undoubtedly a considerable improvement in present efficiency which cannot be measured in specific terms, but is due to the moral effect of the knowledge that such an examination and study of present conditions is now in progress.

THE APPLICATION TO A MUNICIPALITY OF MODERN METHODS OF ACCOUNTING AND REPORTING

BY JOHN M. WALTON,
City Controller of Philadelphia.

Some time ago a prominent banker, while discussing with me a prospective bond issue for the City of Philadelphia, asked if a statement could be had of the city's financial condition and the results of its operation. I showed him our annual and other reports giving receipts, expenditures and indebtedness, but he intimated that he wanted to see more than this; that he wanted to know what the city owned as well as what it owed; the results of its operations each year; the distribution of expenditures between permanent improvements and current expenses. Much the same questions, in varied form, have been put to me a number of times in the last few years and to such an extent that I determined in 1910 to have prepared an inventory of the city's permanent properties as the first step in placing the accounts of the city upon an asset and liability, revenue and expense, and fund basis.

The inventory was taken by the several departments and bureaus of the city and county in November and December, 1910. The unaudited total of the inventory as shown in the balance sheets at December 31, 1910, amounted to \$250,351,352.63. The audit of the property inventory which included the taking up of properties not included in the original inventory resulted in a net increase of \$11,056,796.91 in the cost value of the unaudited inventory, while the acquisition of lands, structures, non-structural improvements and equipment during the year 1911 amounted to \$9,506,408.55, leaving the property account at December 31, 1911, amounting to \$270,914,558.09. All property was taken up at cost. In some few cases, where properties were originally returned at an estimated present value instead of at cost, this method resulted in a considerable reduction in the audited figures.

The audit of the inventories was made to ascertain: (1) that they had been made by responsible officials and that titles, dates and signatures were correct; (2) that all city property of a permanent

nature had been included and that property not of a permanent nature had been excluded; (3) that duplication of properties or entries in error did not exist; (4) that all property was correctly described and classified and that clerical inaccuracies did not exist; (5) that original cost values, as shown, were accurate; and (6) that present values had been established with due regard to depreciation and obsolescence.

In determining whether all real estate and improvements had been reported, and to eliminate duplications and other errors of entry, the co-operation of the Board of Revision of Taxes, and the Bureau of Surveys of the Department of Public Works was obtained. In arriving at an adequate reserve for depreciation of permanent properties, the assessed values of assessable property as determined by the Board of Revision of Taxes was taken as being their present value. On all other structures and equipment, a reserve, based on their estimated life, was calculated. It is believed that the reserve for depreciation account will be of increasing importance as time goes on and more accurate data are collected bearing upon the varying rates of depreciation upon property. When rates of depreciation have been accurately determined, they form the most accurate basis for appropriations for the repair and replacement of property resulting from wear and tear and obsolescence.

An analysis of expenditures by funds (general, loan and park) was begun as of January 1, 1911, in order to distinguish between expenditures for expense and expenditures for capital outlays (land, buildings, non-structural improvements and equipment) and to determine the relative use of loan moneys for expenses and general fund moneys for permanent improvements. In 1911, the net use of general fund moneys for permanent improvements was \$1,184,954.14. This analysis of expenditures furnishes currently and in detail the acquisition of permanent properties so that the records of the city controller's office may show at all times of what the city is possessed. A property ledger contains in several hundred accounts the details that show the cost value of each class and sub-class of property. A property record contains the respective amounts of property by cost value chargeable to each department and bureau.

The analysis of expenditures is a first step toward the determination of cost of operation. This is a new departure in municipal accounting, it being thought in the past that exhibits of the cash

receipts and expenditures of the government were sufficient to enlighten taxpayers as to the results of operation of their municipal governments. If comparison is made between the latest reports of any of our well organized and managed railroads and industrial corporations and the reports of the same companies going back a period of, say thirty years, an investigator is astonished at the wealth of detail data bearing upon the cost of operation of each department and division of the enterprise that has been developed in the later reports. Revenues are also set forth in great detail. The cash statement of receipts and expenditures is rarely if ever seen in modern corporation accounting. I am convinced that in order to operate public business as private business is operated, and that apparently is the natural evolution that may be expected from the conditions of to-day, it is necessary to develop a system of accounting and reporting that will show year after year for comparative purposes and for efficiency tests the results of municipal operations.

In working toward this end the analysis of expenditures was commenced, which in addition to developing the facts as above stated, furnishes a secondary analysis by objects along the lines laid down by President Taft's Commission on Economy and Efficiency. Previously, only the classification by appropriation items for each department was available which made difficult if not impossible comparisons between departments and bureaus with a view to efficiency.

In order to establish and control the asset and liability, revenue and expense and fund system of accounting a general ledger was opened as of January 1, 1911. This ledger is designed to contain in summary form the accounts necessary to produce a set of financial statements showing the financial condition of the city, the condition of its several funds, and the results of operations for a given period, let us say a month, a quarter, or a year. A summary consolidated balance sheet as of December 31, 1911, is here exhibited. Many of these accounts in the general ledger control detailed ledgers such as the property, taxes receivable, water rents receivable, miscellaneous accounts receivable, appropriation and contract ledgers. The purpose of the detail ledgers is to show the condition of each of a large class of accounts that are represented by one controlling account in the general ledger. Thus arranged, the detail ledgers may be proven periodically to their respective controlling accounts in the general ledger by means of a trial balance.

CITY OF PHILADELPHIA

Summary Consolidated Balance Sheet as of December 31, 1911, Showing Assets
Liabilities, Appropriations and Reserves.

| | General Account. For further detail see Exhibit "B," opposite page 14, and Exhibit "E," opposite page 25. | Capital Account. For further detail see Exhibit "C," opposite page 16, and Exhibit "E," opposite page 25. | Sinking Fund. For further detail see Exhibit "D," opposite page 15. | Special and Trust Account. For further detail see Exhibit "D," opposite page 15, and Exhibit "E," opposite page 25. | Total. |
|---|---|---|---|--|------------------|
| ASSETS | | | | | |
| Cash | \$5,828,435 38 | \$15,484,649 68 | \$123,197 92 | \$88,589 48 | \$21,524,872 46 |
| Accounts due to City—Accounts receivable | 3,220,763 61 | 1,543,560 00 | | | 4,764,323 61 |
| Investments (City Loans) | | | 14,050,642 94 | \$21,182 34 | 14,271,825 28 |
| Land, buildings, equipment and other permanent improvements | | 276,914,558 09 | | | 276,914,558 09 |
| Total assets | \$9,079,200 19 | \$167,962,767 77 | \$14,173,839 86 | \$407,732 63 | \$211,613,400 45 |
| LIABILITIES | | | | | |
| Bills and partially audited | \$1,093,926 80 | \$604,204 30 | | \$423 98 | \$2,734,555 08 |
| Warrants payable | 635,991 57 | 11,964 05 | | | 647,955 62 |
| Temporary loan | 1,300,000 00 | | | | 1,300,000 00 |
| Mortgages payable | | 1,926,500 00 | | | 1,926,500 00 |
| Unaudited Debt | | 109,829,800 00 | | | 109,829,800 00 |
| Other liabilities | 22,141 33 | | \$30,984 72 | 18,873 49 | 71,999 54 |
| Total liabilities | \$3,940,059 70 | \$111,472,468 35 | \$30,934 72 | \$19,497 28 | \$115,471,760 45 |
| Excess of assets over liabilities | \$5,139,140 49 | \$56,490,299 42 | \$14,142,905 14 | \$388,235 35 | \$106,141,739 60 |
| | \$9,079,200 19 | \$167,962,767 77 | \$14,173,839 86 | \$407,732 63 | \$211,613,400 45 |
| APPROPRIATIONS, RESERVES AND FUNDS AVAILABLE FOR APPROPRIATION | | | | | |
| Loans authorized and unissued | | \$2,435,500 00 | | | \$2,435,500 00 |
| Excess of assets over liabilities (as above) | \$5,139,140 49 | \$56,490,299 42 | \$14,142,905 14 | \$388,235 35 | \$106,141,739 60 |
| Total | \$5,139,140 49 | \$58,925,799 42 | \$14,142,905 14 | \$388,235 35 | \$109,586,780 60 |
| Less—Appropriations and reserves: | | | | | |
| Appropriations (unencumbered balances) | \$662,650 05 | \$8,073,640 51 | | \$2,290 40 | \$8,738,580 19 |
| Reserves (see Exhibits "B," "C," "D," and "E") | 661,810 46 | \$6,478,593 73 | \$12,968,973 50 | \$79,449 54 | \$22,587,827 23 |
| Total | \$1,324,460 51 | \$14,552,234 24 | \$12,981,943 50 | \$81,739 94 | \$21,346,378 19 |
| Excess of assets and estimated receipts over liabilities, appropriations and reserves | \$3,814,679 98 | \$44,373,565 18 | \$1,174,931 74 | \$2,704 39 | \$87,240,402 41 |
| Distributed as follows: | | | | | |
| Excess after assets over reserves | \$1,495,243 14 | | \$1,174,931 74 | | \$2,670,174 88 |
| Excess proportion over Funds Debt, mortgages payable and reserve for depreciation | | \$115,052,999 16 | | | \$115,052,999 16 |
| Funds available for appropriation | \$2,009,435 82 | \$109,000 00 | | \$2,704 39 | \$2,147,132 10 |

By a recent segregation of the bookkeeping and auditing work of the auditors of disbursements in the city controller's department, the keeping of twenty-two appropriation ledgers and twenty-two contract ledgers, which were previously distributed among all the auditors, has been assigned to two of the auditors as their exclusive work. The other auditors are thus left free to give their entire time and attention to auditing work. The concentration of the bookkeeping has greatly facilitated the preparation of reports upon the condition of appropriations balances and contract reserves. Beginning with January, 1912, reports have been made to city councils monthly showing the condition of each item of appropriation.

EFFICIENCY IN CHILD SAVING

BY JOSEPH S. NEFF, A.M., M.D.,
Director of Public Health and Charities, Philadelphia.

As nearly one-half of the mortality of infants under one year of age is preventable, increasing interest is being aroused to such an extent in its study and prevention, that child saving activities have been organized in most of our American cities, many of them through the instrumentality of the National Association for the Study and Prevention of Infant Mortality.

There are many associations looking to the care of the mother before the birth of the child; to securing legislation to prevent improper marriages; to controlling the "black plague;" to suppressing the free traffic in liquor, which plays such an important part in heredity; to preventing the propagation of defective classes, a prominent factor in causing infant mortality—as a recent study of this subject in Philadelphia has shown that forty-one per cent of all children born of feeble-minded women die in infancy; and to dealing with the whole problem through the science of eugenics.

Efficient work is performed and some good results are obtained through private agencies by the establishing of milk stations, child welfare associations, children's clinics with social service, lectures to mothers and "little mothers," and various undertakings for the welfare of the child. The municipality makes a brave effort to obtain results through generous distribution of literature; by public bulletins, through the newspapers and magazines; by the establishment of open-air hospitals on boats, river piers and in parks; and through the control of maternities and baby farms by licenses and inspections. But as the best results are obtained through education, as ignorance is the greatest barrier to all progress, the highest standard of efficiency assuring the greatest results can be reached only by entering the sanctity of the mother's home, by one of her own sex who is able to speak her language and who, through sympathy, kindness and knowledge, gains the mother's confidence. This is accomplished by the visiting trained nurse, the only means of reaching the greatest majority who cannot or will not avail themselves of the opportunities afforded by the various methods above mentioned. The practicability of this service is demonstrated by the experience

of Philadelphia in the past two years. Eight trained nurses were employed whose energies were confined to a certain circumscribed area in order that fair comparisons could be made. The general publicity campaign, the maintenance of hospitals in the parks and on the piers, the modified milk stations and other activities affected the entire city about equally, so that any difference in morbidity and mortality between the wards 2, 3, 4 and 5 in which the eight special nurses worked and the city at large can be properly attributed to the work of these women.

In order to make the demonstration as valuable as possible, an insanitary group of wards was selected, with poor housing facilities, poor plumbing and much surface drainage, having a highly congested population, largely foreign and ignorant, with a high death rate and the largest number of infants per thousand of population in the city.

The average death rate per thousand of population for five years preceding 1911 in the entire city was 17.68; in these wards it was 21.33. The average birth rate per thousand of population for five years preceding 1911 in the entire city was 24.18; in this district it was 43.37. There were 147 people per acre in the district, compared to 19 per acre for the entire city.

The comparison of statistics of 1911 as compared with 1910 is as follows:

| | Entire City (47 wards) Per Cent | Wards 2, 3, 4, 5 Per Cent |
|---|---------------------------------------|---------------------------------|
| Reduction in mortality in infants under one year of age. . . . | 11.8 | 27.3 |
| Reduction in mortality from diarrhoea and enteritis in infants under two years of age. | 22.0 | 34.6 |
| Reduction in mortality from pneumonia. | 8.0 | 17.0 |
| Increase in mortality from tuberculosis of lungs. | 3.0 | 1.0 |
| Reduction in mortality from epidemic and infectious diseases, . | 3.0 | 2.6 |
| Decrease in mortality from bronchitis. | 14.0 | 35.0 |
| Decrease in general mortality. | 2.8 | 11.3 |

Figures other than those concerning infant mortality are given as the nurses, by instruction, cover the prevention of disease, general sanitation and hygiene.

There should be a municipal department of child hygiene in all large cities, which, co-operating with the various private activities and charity associations in the same line of work, would increase the standard of efficiency in the study and prevention of infant mortality.

EFFICIENCY IN THE FISCAL OPERATIONS OF CITIES

BY EDMUND D. FISHER,

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and Deputy Comptroller City of New York.

Efficiency is a relative term. Accomplishment in municipal administration is more or less restricted by the lack of standards of efficiency under civil service and by the lack of continuity of management, as well as through the inherent political distraction of official life.

Much, however, has been accomplished in the various cities of the country during the last decade—partly through the awakening of civic interest impelled by the high costs resulting from municipal extravagance, and partly through the co-operation of civic organizations such as bureaus of municipal research, citizens' unions, and national associations and leagues such as the National Municipal League and the National Association of Comptrollers and Accounting Officers.

This article, however, will refer only to some of the newer methods of financing adopted by Hon. William A. Prendergast, comptroller of the City of New York, who has developed the principle of efficiency in municipal administration with the vigor and intelligence of an experienced business man. As the annual movement of the receipts and disbursements of the City of New York is over half a billion dollars, the importance of its finances in domestic and international relations is apparent.

As the basis for administrative and financial reform, the comptroller had prepared for departmental and public use a clear and comprehensive statement of the actual condition of the city's finances at the time he took office. This statement outlined, first, a definite policy of funding amounts borrowed against uncollectible taxes, and providing for their cancellation partly by issues of corporate stock and partly through annual instalments in the budget to be raised by taxation, and, second, the policy of separating money borrowed for public improvements from money borrowed in anticipation of current revenues; thus preventing the use of corporate stock (bond) funds for

current purposes. The best evidence of the effect of this cleaning-up policy is the fact that, while on January 1, 1910, there were \$60,000,000 outstanding in revenue bonds, the amount outstanding on January 1, 1912, was but \$47,600,000, or a reduction of \$12,600,000; and this notwithstanding the rapid growth of the city's business and the fact that its annual current requirements increased by at least \$10,000,000 during the period mentioned.

As financing the city's public improvements and current needs is among the most important functions of the comptroller and involves the borrowing of large sums of money, attention was first devoted to correcting certain disadvantageous practices which have existed in New York City's financial management since its organization. Perhaps the greatest evil which prevailed was the necessity of borrowing money in anticipation of the collection of taxes which were not due under the law until more than nine months after the beginning of the fiscal year. In 1910 the borrowing and re-borrowing for this purpose aggregated \$200,000,000. In 1909 one of the chief items of current expenses was the interest for such anticipatory borrowing, which in that year amounted to \$5,200,000.

In the spring of 1910 a measure was introduced by the comptroller in the New York State legislature, permitting the issuance of what have become known as "Revenue Bills," which are practically equivalent to revenue bonds or revenue warrants. This new form made possible the borrowing of money in London or Paris, frequently at much lower rates than were obtainable in American markets. This principle also affords an occasional opportunity of realizing profits on exchange. The total amount of such borrowings abroad during the year 1911 was approximately \$38,500,000, which, expressed in terms of foreign currency, amounted to 120,000,000 francs and 3,200,000 pounds sterling. The condition of the exchange markets during the past year was such that, in borrowing sterling abroad, exchange was sold at a rate sufficiently high, namely, 4.8650, to permit of the purchase of a "cover" for fall delivery at 4.8550, being a profit of one cent to the pound. In this way a saving of \$20,000 was effected and the average rate of sterling borrowing was reduced from $3\frac{1}{4}$ to 2.95 per cent.

As it is also necessary to finance tax arrearages, it is at all times practicable to renew items where exchange is not sufficiently advantageous to make payment of maturing bills desirable. During the

month of December, 1911, foreign maturities aggregating \$7,000,000 were so renewed, with the general result in international relations involved as in effect to correspondingly strengthen this country's reserves. Partially because of this new financial policy and partly by reason of cautious borrowing, the annual interest account of the city has been reduced from its 1909 "high-water mark" of \$5,200,000 to the comparatively low annual charge for this purpose in 1911 of \$3,800,000, notwithstanding an increasing volume of business.

The law which fostered this enormous amount of anticipatory borrowing, however, was manifestly unsound. Consequently, in 1910, an investigation of the methods of collecting taxes in various American cities was initiated. Out of thirty cities interviewed concerning the subject it was found that eight, Cleveland, Baltimore, Kansas City, Indianapolis, Los Angeles, Fort Wayne, Topeka and Washington, D. C., were collecting on the semi-annual basis, and that the average date for the collection of taxes was about four months after the beginning of the fiscal year. In many cases collections are made as soon as thirty days thereafter. It was also found, through correspondence with authorities abroad, that, in London, municipal rates (taxes) are levied half-yearly, in advance, and in some districts an option is given whereby payment may be made quarterly. This is regarded as a special privilege and is particularly desired by the people. The custom of levying rates (taxes) half-yearly is also in vogue in the British provinces.

Attempting to change the habits of the great City of New York in this respect seemed rather a huge task at the outset, but the work was begun and consummated. The technical language of the act adopted for the semi-annual collection of taxes follows:

All taxes upon personal property and one-half of all taxes upon real estate shall be due and payable on the first day of May and the remaining and final one-half of taxes on real estate shall be due and payable on the first day of November. All taxes shall be and become liens on the real estate affected thereby on the respective days when they become due and payable as hereinbefore provided and shall remain such liens until paid.

The second half of the tax on real estate which is due as hereinbefore provided on the first day of November following the payment of the first half may be paid on the first day of May or at any time thereafter, providing the first half shall have been paid or shall be paid at the same time, and on such payments of the second half as may be made in such manner prior to November first a discount shall be allowed from the date of payment to November first at the rate of four per centum per annum.

Another change in the method of financing municipal requirements which has proven particularly advantageous to the City of New York is the marketing of corporate stock (bonds), so far as practicable, through but a single sale in any one year. This practice affords the bankers and brokers, who are practically the chief bidders at corporate stock sales, ample opportunity to market the securities so purchased without fear of the depreciating tendency of frequent sales. Large sales, however, necessitate large bank balances during the period of disbursement, with the consequent loss of interest. Partly for this reason and partly to secure flexibility in financing, legislation was enacted which authorized the comptroller to issue what are known as "corporate stock notes." The provisions covering their issue are as follows:

The comptroller is authorized to issue, whenever he may deem it for the best interests of the city so to do, bills or notes, hereinafter described as "notes," maturing within a period not to exceed one year, in anticipation of the sale of corporate stock duly authorized at the time such notes are issued. The proceeds of the sale of such notes shall be used only for the purposes for which may be used the proceeds of the sale of corporate stock in anticipation of the sale whereof the notes were issued. All of such notes and any renewals thereof shall be payable at a fixed time, and no renewal of any such note shall be issued after the sale of corporate stock in anticipation of which the original note was issued. In the event that a sale of such corporate stock shall not have occurred prior to such sale the comptroller shall, in order to meet the notes then maturing, issue renewal notes for such purpose. Every such note and renewal note shall be payable from the proceeds of the next succeeding sale of corporate stock. The total amount of such notes or renewals thereof issued and outstanding shall at no time exceed one-half of the total amount of corporate stock authorized to be issued and if no sale of corporate stock shall have been held within six months preceding the issue of such notes then the total amount of such notes or renewals thereof, issued and outstanding, shall at no time exceed one-half the total amount of corporate stock authorized to be issued on the date which shall be six months after such last preceding sale.

The Corporate Stock Note Bill provides, in effect, a short-time instrument analogous to the railroad note. It is estimated that the city will save approximately \$1,000,000 annually in interest through the operation of this bill. The comptroller is now in a position to have a sale of corporate stock at any time rates appear most favorable, when the volume of bills then outstanding will be automatically funded. These bills have recently been sold on a basis of approximately three per cent, whereas former corporate stock issues of the

city are practically on a four per cent basis. By this temporary financing a saving of about one per cent was effected. This saving, of course, was possible only because of the city's unusually good credit and because money market conditions were exceptionally favorable. If rates were very high, however, the principle would be equally valuable, because a bond sale would be inexpedient.

There was also introduced in the legislature, in 1911, what is known as the "Foreign Sales Measure," the essential subject matter of which is as follows:

When in the opinion of the comptroller it shall appear desirable to have the whole or any part of an issue of corporate stock made payable in the currency of a country other than the United States, such corporate stock so to be sold shall be made payable in such currency, with certificates in such amounts, and sold in such manner as may be duly authorized by the commissioners of the sinking fund, provided, however, that in case such corporate stock payable in a foreign currency or currencies is not sold in the manner prescribed for the sale of corporate stock under the provisions of Section 182 of this Chapter (public bidding), the comptroller shall invite sealed, competitive tenders for the purchase of such corporate stock in such manner as the commissioners of the sinking fund shall prescribe; and he shall make award or awards to the highest bidder or bidders for such corporate stock with the full power to reject all bids. The proceeds of sales of such corporate stock shall be recorded in the books of the Finance Department in the terms of the currency of the United States, as well as in the terms of such foreign currency in which such corporate stock shall have been issued.

This legislation will permit the sale of corporate stock in European cities, and the bonds may be made payable both as to principal and interest in foreign currency. As yet there has been no test of this measure, no sale of corporate stock having been held for over a year. It is a question whether European money markets at the present time are as favorable to the absorption of American investment securities as home markets.

In connection with repaving requisitions the practice in the City of New York for many years has been to issue fifty-year bonds. As a matter of fact, the life of the average pavement is hardly longer than ten years. Manifestly, fifty-year corporate stock (bonds) should not be issued for this purpose, as on this basis the pavement would have to be renewed at least five times during the lifetime of the original issue, thus storing up for posterity a burden which should be borne by the present generation. Consequently, it has been determined to issue ten-year bonds for the purpose mentioned.

In view of the city's size and the vast amount of its repaving requirements, this corrective principle will be vital in curtailing the growth of the city debt.

All the measures to which reference has been made have a more or less direct bearing upon the policy of financing the several sinking funds of the City of New York. The corporate stock note gives a basis for financing between bond sales, is a logical sinking fund investment and relieves the surplus moneys of the sinking fund from investments in long-time issues of corporate stock. The correct sinking fund principle is, of course, to amortize through the purchase of old issues rather than to use such funds for the purchase of new issues. Someone has said, "There can be no real sinking fund without surplus." Investment in new issues eats up surplus. Ten-year repaving bonds, corporate stock notes and revenue bills make desirable short-time investments for sinking fund purposes; and as they are all constantly being repaid, the sinking funds are automatically gaining cash strength. While the sinking funds of the City of New York are very large and there will be no appreciable strain upon them for the next quarter of a century, nevertheless, it is manifestly more desirable that investments for sinking fund purposes shall be upon an absolutely sound basis and that, so far as may be practicable, the strict principle of amortization be developed.

The comptroller of the City of New York has organized the Commission of Standardization, which now acts under direction of the Board of Estimate and Apportionment. The work of this commission is developing a uniform system of supply purchase, distribution and control, under standard forms of contracts and specifications. System and business methods are replacing the chaos and wasteful practices which in the past were inevitable through the lack of uniformity in the methods of one hundred different purchasing agents, with the consequent differences in specifications and unit prices. Much constructive work has also been done in the Department of Finance in connection with its accounting methods, so that a strictly business system is being established. All this, in effect, means that there are being introduced in the various branches of municipal activity, so far as possible, the same methods, the same standards and the same requirements that are producing effective results in great private corporations.

In co-operation with a commission appointed by the mayor,

the comptroller has been accumulating data on what is called "New Sources of Revenue." During the last year a careful study has been made of more than fifty special topics. A new source of revenue has been defined as—first, a decreasing or complete stoppage of leaks in the expenditure of public moneys due to short-sighted and unscientific management; second, an increased income from a present source of revenue; and, third, a latent revenue as yet untapped by the city. Working on these principles, the revenues of all departments of the city, including the county offices within its territorial limits, have been examined in order to ascertain whether such sources of revenue were at their maximum capacity. Analyses have been made of the successes and failures of different methods of raising revenue in other cities of America, Europe, Canada and Australia.

Efficiency in municipal administration and financial reform is largely dependent upon hard, intelligent and constructive work, with the gradual establishment of the principles developed. The most serious difficulty in the way of attainment of the ideal in municipal management is the lack of continuity. The shifting attitude of the voter gives little promise of any change for the better in this respect. It is important, therefore, that the co-operating continuity of civic organizations be made as practical and vital as possible. Their support for this purpose may be regarded as in the nature of double taxation, yet no money devoted to philanthropy could be better applied than in developing efficiency in city government. The civil service should be developed so that there will be a continuing oversight of the clerk or official who is now merely launched upon the sea of service through the medium of a single examination. A system of efficiency records properly prepared and applied would soon produce a corps of civic workers placed with due regard to their ability. The result would be a startling reform in civic activities. While politics must be a continuing element in American life, every effort should be made to choose candidates of inherent ability for their respective positions.

ECONOMY AND EFFICIENCY IN THE DEPARTMENT OF WATER SUPPLY, GAS AND ELECTRICITY, NEW YORK CITY

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This article is written for the purpose of describing the character and scope of the work undertaken to promote economy and efficiency in the Department of Water Supply, Gas and Electricity of New York City.

The terms "economy" and "efficiency" in their application to the department in question involve two intimately related ideas: efficiency, meaning the attainment of a given result with the minimum expenditure of energy; and economy, as signifying the minimum expenditure of money consistent with the attainment of that result. The warranted degree of economy is a relative factor dependent upon the value of the result to be obtained. Good public service cannot be jeopardized by false or mistaken economy due to the disregard of all else but the effort to save money. The aim should be to attain the best public service at the least cost to the city.

The practical application of the principles of economy and efficiency necessitates the supervision of the various divisions of the department in order to ascertain: first, if work proposed or in progress is necessary for the effective operation of any function of the department; second, if work deemed necessary is accomplished under present conditions with efficiency; third, if a greater efficiency can be obtained by improved methods and the betterment of physical conditions; fourth, if such improvements will effect a greater economy in operation, consistent with efficient service. To allow of this supervision, and for the purpose of administrative study, summaries of detailed reports prepared in graphic form, when practicable, show the results of work accomplished throughout the department and the cost of operation in order that the principles of economy and

efficiency may be scientifically applied. Such information must present concisely facts similar to those available for the use of the executive head of a successful commercial enterprise, for no administrative head must be wholly dependent on verbal statements of subordinates.

The proper distribution of expenditures to determine accurate costs incurred in the operation of the various functional divisions of the department along lines similar to those used in good commercial practice, is the basis of securing the information required by administrative officials. To accomplish this result, a Division of Costs and Statistics collects and tabulates the facts and data pertaining to the various activities of the department on a unit cost basis. For instance, the efficiency of a given pumping station is determined by the duty of a million foot pounds per hundred pounds of coal and the economy in cost per million gallon feet of water pumped. It will therefore be seen that the problems arising in connection with the work of the department are largely those of administration which require knowledge of operating conditions resulting from efficient organization and significant statistical information.

It has been necessary to reclassify the expenditures of the department on a functional basis in order that cost data may be properly distributed. This involves a summary of facts pertaining to the operation of the department segregated under administration, operation and maintenance.

Monthly, quarterly and annual reports are compiled by abstracting the totals of the columns in an analytical expense ledger in which all the information indicated by the classification of expenditures is summarized. The reports show in detail the cost to the department, of each function, sub-function or division of a sub-function, if any. The reports also include comparative figures for a corresponding prior period, month, quarter or year, the accumulated figures to date, or both, as the case may be. Extra typewritten carbon copies of the reports are made, and the sections showing the detailed expenditures of each bureau and division are sent to the respective administrative heads. The sheet for pumping division, for example, on which appears the cost of operation and maintenance of pumping stations, is sent to the chief engineer and the division engineer in charge of pumping stations. A system for obtaining the cost and efficiency of each pumping station is also in use. This system applies to all

divisions of the department which have to do with operation and maintenance and allows of the following information being obtained:

- (1) The cost of each division of a sub-function, e. g., cost of each pumping station.
- (2) The cost of each job or unit cost, e. g., the cost of a repair job in a pumping station.
- (3) The itemized cost of each job.

All of the information necessary for the analysis of expenditures, including the costs and statistics records, is based upon and compiled from the expenditure vouchers and pay rolls, the stores control system, and the time and service records.

In addition to the reports already described, monthly statements are sent to the several administrative heads of the department. These statements contain the amount of expenditures as well as encumbrances on account of each appropriation or other fund authorized and the balances unencumbered.

The object of all the records which have been described is to secure the accurate costs of the department for the purpose of intelligent administration and of obtaining proper estimates for appropriations and other funds.

The department collects the water revenue of the city, and deposits it to the credit of the City Chamberlain, who acts as the treasurer, vouchers are submitted to the Department of Finance for audit and approval, after which they are sent to the City Chamberlain for payment. It is necessary, however, that the administrative officers of the department have the information as to the revenue side of the accounting as well as expenditures, and the following is therefore prepared:

Revenue Account or Annual Statement of Income and Expenditures

- (1) The Revenue of the Department.
- (2) The Expense of Operating the Department and maintaining its properties. This will include expenditures by others for the benefit of the Department, i. e.:
 - Interest and Sinking Fund Installments (Comptroller).
 - Rents—Sinking Fund Commission.
 - Legal—Corporation Counsel.
 - Printing and Stationery—(City Record).
- (3) The Net Revenue Account.

Finally the annual financial statement of the department shows its assets and liabilities.

The Department of Water Supply, Gas and Electricity represents an estimated investment by the City of New York of over \$300,000,000 and is one of the most important divisions of the municipal government.

It supplies the city with more than 500,000,000 gallons of water daily and bears the responsibility of maintaining a constant and abundant supply. It safeguards the lives of over 5,000,000 people by protecting the supply against contamination. It has jurisdiction over an area, including the watersheds, of more than 600 square miles, and also over the aqueducts and the numerous storage reservoirs. It operates the high pressure fire stations and maintains and supervises the extension of this service.

The entire street and park lighting of the city, the lighting, heating and power service of municipal buildings, and the testing of the gas supplied to consumers comes under the supervision of the department, together with the inspection of 10,000 illuminated signs and over 550 theaters. The expenditure incurred in lighting the 77,000 street lamps within the city limits amounts to \$5,000,000 annually.

As a revenue collecting function of the city the department is second in importance to the office of the Receiver of Taxes. The total revenue or charges for water consumed in the year 1911 amounted to \$14,420,000. This fact gives the department a singular position as compared with the other divisions of the city government. The substantial revenue of the department, considerably in excess of its expenditures, places it on the self-sustaining basis of a profitable commercial enterprise.

The importance and the responsibility of these public services entrusted to the department and the duty to the taxpayer call for administration along business lines, that is, with economy, and efficiency.

The department, through the efforts of its administrative heads, has accomplished many economies and has also attained a higher degree of efficiency in various branches of its work.

One of the most important features of efficiency is to promote the personal efficiency of the individual employee. This is accomplished by means of service records which show the degree of proficiency in

the performance of his duties, allows the acknowledgment of efficient service, discloses inefficiency, and places responsibility.

Inequality in clerical work with respect to compensation results in discontent and inefficiency on the part of the individual employees and, in consequence, positions are graded with respect to the character of work irrespective of incumbents.

Special effort has been made to create a feeling of co-operation among the individuals of the different branches of the department and to prevent the work from acquiring the reputation of being an investigation solely for the detection of inefficiency. The most effectual betterment of conditions is dependent upon the earnest co-operation of every employee of the department.

In the year 1910 the per capita consumption of water for New York City was placed at 127 gallons per day. Through the vigorous campaign against water waste resulting from the efforts of the department to conserve water during the protracted droughts of 1910 and 1911, the daily per capita consumption was reduced to 93½ gallons. This gives New York City a lower per capita consumption than any city in the country of over 400,000 population, with the exception of San Francisco. This important economy was accomplished by a house to house inspection for the purpose of discovering leaking fixtures and by the use of the pitometer to determine the presence of leaks in mains. Direct appeal was made to the individual consumers through means of a pamphlet, widely circulated by the department, illustrating leaks caused by carelessness, poor workmanship, and faulty material used in plumbing fixtures. The pamphlet emphasized the fact that a leaking faucet wastes annually from \$2.06 to \$6.00 worth of water, while water flowing through an opening the size of the eye of a needle $\frac{1}{32}$ in. in diameter and under a pressure of thirty-nine pounds will amount, on a meter rate basis, to \$11.68 annually. These examples showed the large amount of water wasted through small leaks where the general idea is that they are too insignificant to warrant attention. Considerable attention was also given to leaks resulting from bad condition of service pipes and house fixtures, owing to the effect of corrosion, damage to pipe by unequal settlement, badly wiped joints, and electrolysis.

The issuance of this pamphlet was the first attempt on the part of the city to educate the public in the cost of water and to solicit the co-operation of consumers to the necessity of checking waste.

Since the water waste detection work was started in the year 1910, leaks from which water was going to waste that would be worth, at meter rates, over \$3,000,000 have been stopped. It has cost the taxpayer only a little over \$75,000 to accomplish this result.

By the addition of one hour to the working day for the department, affecting over 700 employees, the total number of work days was increased over sixteen per cent, equivalent to thirty-five additional working days for each employee per annum, or a total of nearly 25,000 additional working days yearly.

The consolidation of the Bureau of Water Supply, under one head instead of under six independent heads, as formerly, resulted in a yearly reduction in salaries of about \$300,000, and in the elimination of proposed works which would have cost the city about \$1,800,000. The substitution of other work effected an annual economy in operating and maintenance charges of \$200,000.

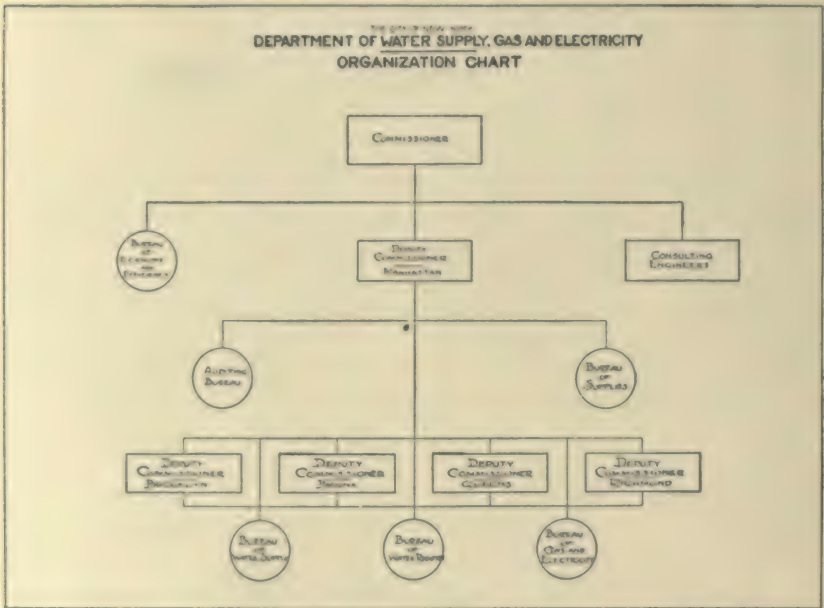
In the year 1909 the cost of coal consumed by the department amounted to \$613,806. The cost of coal in 1910 was \$491,292, showing a saving of \$122,514, over the cost for the previous year, a condition which resulted from more economical and efficient means of purchasing and handling coal. In addition, there was 2.5 per cent more water pumped in 1910 than during the previous year. Standard specifications and contracts for coal have been adopted. A complete system applying to the inspection, weighing, sampling, analysis, and delivery and payment and also as to consumption of coal was installed.

The reduction in the annual cost of street lighting enabled the department to appropriate this saving to light a number of new avenues.

Through a complete reorganization in the Bureau of Water Register, the installation of improved methods and procedures, and the attainment of an increased efficiency in the work of the bureau, the revenue of the city was increased from \$10,652,213.89 in 1909 to \$14,420,000 in the year 1911. By a careful investigation and study of the clerical methods employed by this bureau, work was redistributed equitably to secure the maximum obtainable from each individual with the result that twice as many accounts can now be handled in the meter reading division, notwithstanding the increase of work due to the more frequent reading of meters, which caused the work to be doubled. A new system of inspection has also been

installed which allows this work to be carefully checked and recorded while inspectors can be located at any time while on their rounds of inspection. This work is periodically tested and compared to see that the maximum personal efficiency is being obtained.

A substantial annual saving to the department is the result of the establishment of a Bureau of Supplies. This was accomplished by the more economical purchase of materials, the standardization of supplies, and the formulation of improved specifications, together with the more efficient methods due to the centralization of storing



and distributing supplies along lines comparable with the most improved methods practiced in large industrial enterprises.

The complete and improved system of filling out pay rolls by mechanical means reduced the time required to fill out one pay roll sheet from twenty-five minutes to twenty-five seconds.

The application of the principles of economy and efficiency to the operation of the department, some of which have been enumerated in the previous paragraphs, illustrates the great value of this character of work to the city. Sustained effort along these lines promises to

accomplish further improvements. The appreciation of this fact by Commissioner Henry S. Thompson caused him to establish a new division of the department, known as the Bureau of Economy and Efficiency, devoted wholly to this special character of work. The bureau is a separate branch of the department and its official head reports direct to the Commissioner. Its staff of employees consists of experts in accounting and engineering through whose efforts are made critical analyses of operating methods of the department.

The bureau will keep pace with advances in methods adopted by commercial organizations, with the idea of applying them to the operation of the department. A library, consisting of bulletins and pamphlets and reports published by the federal and municipal governments, is being collected. This gives access to any information collected by others which may be of value to the department.

The exact saving to the department to be obtained from the new bureau is a difficult matter to prophesy and cannot be calculated in dollars and cents. It is generally conceded that the business operated on scientific principles of practical utility is the one that attains the greatest commercial success, and the essentials of economy and efficiency affecting this result are applicable to municipal work and especially to this department.

EFFICIENCY IN WATER REVENUE COLLECTION

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The attainment of efficiency in any undertaking is, to a great extent, dependent upon a careful study of local conditions and the assimilation of a vast amount of detail which has to be co-ordinated along certain definite functional lines. This is especially true when applied to the water department of a municipality; and, when it is further realized that furnishing a supply of water provides by far the largest source of revenue in most cities, the application of these fundamental principles deserves more attention than is ordinarily given to this important matter.

As a factor of efficiency in water revenue collection, inspection undoubtedly takes first place. No system of accounting control can possibly offset inspection work inefficiently performed. The first essential, therefore, would be to obtain capable and conscientious inspectors. The next step would be to divide the city into districts, each district being just large enough for one man to cover. The inspectors should be shifted from district to district as often as possible, especially in the larger cities where it is more difficult to keep in close touch with the men in the field and their work. Protracted service in the same district permits an inspector to get too well acquainted with the consumers with whom he may come in contact. It would be advisable to have a corps of supervisors in the field to oversee the work of the inspectors.

Requests for inspection would be made on the inspection division in card form, the card later forming a permanent record of premises inspected. The information on these cards would be spread upon the inspectors' report blanks, and would contain data covering the various purposes of inspection, for instance, complete examinations, building purposes, taps and services, demolitions, metered premises or unmetered premises. These reports would be of various colors, according to the nature of the inspection required, and would contain a series of questions to be answered by the in-

spector. A record should be kept in each division of the requests made for inspections, and a form of receipt retained by the inspection division upon rendering the requested reports to the originating division.

A route sheet, filled in by each inspector, showing the order in which he proposes to examine the various premises, would be left with the chief inspector before the former leaves headquarters each morning. The inspectors would be required to report their work on a daily summary sheet, showing the time of arrival at the first and of departure from the last premises visited during the day, as well as the street addresses and the order of inspection. These summary sheets would give a synopsis of work performed, including meter readings, examinations, inspections, special reports, et cetera, and would also show work assigned to an inspector which he failed to complete.

A supply of notices covering the more prevalent forms of violations and irregularities would be furnished to the inspector, who would serve them on owners and occupants as occasion demanded. They would be used in cases of the discovery of meters not accessible or in need of repair, leak and waste, hose violations and use of water without permission. It would be advisable also to provide special forms of meter dial charts to record the index where there is any doubt as to the registration. The inspector would likewise be supplied with special report blanks for use in connection with irregularities not covered by printed notices for specific violations. All notices should be printed on a standard size of form which would fit into a metal binder. The inspectors should submit a daily list of irregularities discovered for the correction of which notices had been served. Such procedure affords a complete system of control by the central office if appropriate follow-up notices are issued from these lists.

An efficiency record would be compiled from the synopsis of each inspector's work as shown on his daily summary sheet. The monthly totals of these record sheets would make a valuable comparative report of each inspector's work.

The inspection and accounting records are so interdependent that, without a proper accounting system, the inspection work, no matter how efficiently performed, must necessarily be greatly impaired. The information obtained in the field by the inspectors

must not only be accurately recorded but must also be controlled by the accounting records.

Before any entry is made in a consumer's ledger it should be placed in control. This control would be obtained by scheduling day by day the records of original entry, viz., the meter reading sheets, the reports on collections, the inspectors' reports on new or additional supplies, and the adjustments of rates. For this purpose various kinds of schedules would be used, including schedules of charges for unmetered services, of meter readings, of collections and of adjustments. The totals of the daily schedules would be recapitulated on summary sheets, the totals of which in turn would be entered in the respective revenue and adjustment journals or on a monthly recapitulation of collections. The analytical totals of these latter records would be posted monthly, through the general journal, to the appropriate accounts in the general ledger. The schedules would be compiled by listing all items so as to obtain the total debits or credits to be posted to each ledger. The ledger clerks would post individual items to consumers' ledger accounts, while the control clerk would enter the totals only on the control sheets of the respective ledgers.

A control card, on which the particulars of each unmetered supply and alterations thereto may be originally recorded, provides an effective check if the bills are made out from such cards instead of from the consumers' ledgers. The ledgers should be balanced monthly and agreed with the respective control sheets. A summary of the control sheets would be made each month so that a grand total of the consumers' ledger balances could be compared and agreed with the balances shown on the respective accounts in the general ledger.

From the time the main is tapped, inspection should be prompt and painstaking. By maintaining proper records covering the erection of new buildings, and the alterations to or demolition of old buildings, much waste of water will be prevented and revenue obtained which might be otherwise overlooked. Where the charge for water supplied for building purposes is based on the estimated quantity of materials to be used, such estimates should be carefully checked with the plans by a qualified person. An affidavit by the builder, owner or architect is not usually sufficient. Co-operation with the building department, where the detailed plans for new and

altered buildings are examined and filed, would appear to give the most satisfactory results. The building in any event should be surveyed on completion, as deviations from the original plans are frequent and a loss of revenue is likely to occur unless attention is paid to such matters.

Unquestionably the control over the collection of water revenue will be most efficient when the charge for water consumed can be based on the registration of the water meter. The use of a meter conserves the supply by controlling waste, and constitutes the only equitable basis of charge to the consumer. Many cities, however, do not own the meters and are consequently working under difficulties. The location of the meter is also of importance and has a very direct bearing upon efficiency in meter reading. The sealing of meters, too, is a matter requiring competent supervision if proper control over revenues is to be obtained.

All meters should be read and billed regularly and promptly, the larger meters receiving more frequent attention than the smaller ones. Careful study should be made of each inspector's work to insure the maximum number of readings. Loose leaf meter reading sheets in metal binders afford greater facilities in reading than any other method because of the ease with which they can be distributed or rearranged to meet altered conditions. It may be found expedient to code the various defects that may exist in a meter and thus save the writing of much detailed information. Meters out of order demand prompt repair if a loss of revenue due to comprising an "average" bill for a lengthy period, is to be avoided.

Rules and regulations covering the setting, disconnecting and repairing of meters should be established and strictly enforced. Such work should be controlled by the issue of permits to licensed plumbers, if not performed by the water department itself.

Accurate meter reading, while absolutely necessary, is not in itself the most vital feature connected with metered supplies. This was very clearly disclosed by tests conducted in New York City within the past two years when, of 20,000 meters examined, some were found to be registering only 15 per cent., and the average only about 75 per cent. of the water passing through them. The consequent loss of revenue assumes alarming proportions when one considers that New York City, where only one-fifth of the supplies are metered, collects approximately \$6,500,000 annually in meter rates.

It would therefore seem advisable that all meters should be tested at a properly equipped meter testing station, operated by the department. The insertion of test tees provides an easy method of making some of these tests on the premises without removing the meter. All meters require attention at intervals, and testing will usually be found a fruitful source of revenue far in excess of the cost of such work.

Existing laws and peculiar local conditions prevent many municipalities from adopting universal metering or from even acquiring physical possession of the meters. Various methods of charging have been established to meet these conditions, such as the frontage rate, assessment rate, rates based on fixtures, et cetera, but all are open to criticism. The disregard of personal responsibility, which the unlimited supply for a fixed charge fosters in the consumer, makes efficient inspection the more imperative.

By co-operation with the building department, a daily or weekly list of new and altered buildings may be obtained. The checking of these lists and obtaining accurate reports thereon in detail is a vital necessity. This, however, is only the initial step and must be followed up continuously by other methods. A system of certified monthly reports from plumbers, showing additional supplies or fixtures installed by them, should be inaugurated and carefully checked to the records and the charge to the consumer adjusted accordingly. All plumbers should be licensed.

Such work should be still further supplemented by a house-to-house examination of all premises, as frequently as may be deemed expedient, with the object of obtaining first-hand information as to the present status of each supply, so that, if necessary, the charge may be corrected and the department get full compensation for the service it renders.

By no means the least important phase of the house-to-house examination is the question of leak and waste of water, which should receive particular attention at such time. Some cities are collecting thousands of dollars annually by way of fines for leaky fixtures which the consumers neglect to repair promptly. But the creation of an additional source of revenue is not the only beneficial result. New York City saved 25,000,000 gallons of water daily last summer as a result of its leak and waste campaign, thus conserving the supply and at the same time reducing pumping costs.

The pitometer is a valuable adjunct to waste detection, and frequently, through its operation, an investigation is prompted which discloses supplies for which no revenue is being obtained.

In a community where water is supplied to shipping it is usually found necessary to establish hydrants on public docks for this purpose. This, too, is a source of revenue which needs careful inspection. It is inexpedient to keep constant watch over these hydrants and useless to meter unless a record can be kept of the water taken by each boat. Probably, therefore, the most economical method of controlling such revenue is by means of permits, issued semi-annually, the charges therefor being based on a sliding scale commensurate with the capacity of boilers and the purposes for which the craft is operated. The shipping hydrants must be effectively patrolled in order that those not entitled to take water may be prevented from doing so until a permit is obtained. Where the water front is extensive, the use of a patrol boat to supplement the work of inspectors on shore has been found advantageous. The imposition of a heavy fine for taking water without authority will quickly force the shipping interests to realize that an effective watch is being kept over their movements. The co-operation of outside agencies, such as the police and the state or federal licensing authorities, is of great assistance in strengthening such control.

It would be necessary to compile card records of all boats frequenting the port and to obtain an annual affidavit from the owners of all boats under their control, giving reasons, if any, why application is not made for permits for all their craft. The inspectors should report all boats found taking water, and the clerks would enter this information on the card record. If no permit has been issued or permit has lapsed, prompt action should be taken.

In regard to the actual collection of rates the coupon form of bill will doubtless be found most satisfactory. It is desirable that all bills tendered for payment should be listed on analytical schedules of collections before being handled by the cashier. This would provide a medium of check upon the daily receipts. A further check would be obtained by listing the coupons in the preparation of control schedules.

Notices in the form of reminders should be mailed to consumers whose accounts are in arrear. If such warnings are disregarded, penalties for non-payment should be imposed. The cashier

should be required to make a daily report on collections, distinguishing between the different classes of receipts. Such daily reports should be supplemented by a monthly statement showing comparative and accumulated figures.

A description should be written covering the detailed procedure employed in water revenue collection. A compilation of this character will not only afford the individual clerk or inspector information relative to his own work, but will make it possible for him to familiarize himself with the practical working of the complete scheme. This in itself should do much to improve the efficiency of the personnel. An understanding of the whole situation will make each man more valuable in his present capacity and more satisfactorily equipped for increased responsibility.

During the two years ending December 31, 1911, New York City increased its revenue from water approximately four and a half million dollars over and above the best previous showings in the history of the department. The greater part of this increase was due to the installation of the new system of inspection, improved accounting methods, and reorganization of the entire revenue collecting bureau along the lines herein indicated.

In conclusion, efficiency in water revenue collection can be obtained most readily when the following favorable conditions exist: (a) When all supplies are metered and the meters are owned by the municipality. (b) When the meters are periodically tested and overhauled. (c) When pitometer and similar waste detection work is prosecuted within reasonable limits. (d) When a well-planned system of inspection is enforced by competent supervision and rigid discipline. (e) When appropriate records based on inspectors' field reports are under a proper system of control that effectually prevents dishonesty or fraud. (f) When charges are promptly and regularly billed. (g) When all forms are standardized and adequate filing facilities are provided. (h) When the responsibilities of the staff are clearly outlined on an organization chart and their duties definitely fixed by a written procedure established for their guidance. (i) When the administrative head can promote and maintain that co-operation between the functional divisions of the bureau which is so essential to a successful consummation of efficiency work.

SECURING EFFICIENCY THROUGH A STANDARD TESTING LABORATORY

BY OTTO H. KLEIN,

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The establishment of a municipal laboratory for the purpose of testing materials used or intended to be used in the construction of public improvements, and also supplies furnished to public institutions, is by no means an undertaking of recent date. Such laboratories have been in existence for many years, especially in the capital cities of Europe. In America, however, the importance of a municipal testing laboratory has only been given its deserved recognition for a decade, more or less. It developed principally from the desire of the paving engineer to keep a check on the various materials used in the construction of pavements in his city. And these laboratories, as a rule, were poorly equipped and were hardly able to control the street work in course of construction, to say nothing of conducting research work.

At the time of the consolidation of the greater City of New York in 1898, only two small city-owned laboratories, devoted to the examination of materials of construction, existed, and these were only designed to conduct examinations of cements and asphalts. Only two boroughs of the greater City of New York at the present time have small laboratories which are able to undertake the physical and chemical examination of the paving materials used in the construction of their streets. The officials of the remaining three boroughs have gradually discovered the necessity of testing their cements and paving blocks, and the consequence was the establishment of small testing stations in their boroughs, principally confined to physical tests of cements, while chemical analyses of paving materials had to be entrusted to private analytical chemists not in the regular employ of the City of New York.

As increasing improvements—the big bridge, water works, subways, docks, ferry service, etc.—developed, the examination of materials of construction became most imperative. Yet it remained the policy of the officials of the City of New York to confine the sci-

tific examination of materials required for these vast enterprises to quite narrow limits, and private laboratories were almost invariably entrusted with this important work.

With the establishment, in 1907, of the Water Board to build the new Catskill Aqueduct, a testing laboratory was inaugurated for the purpose of testing the materials used in its construction.

The Department of Water Supply, Gas and Electricity had a laboratory for water and gas analysis, and also for the examination of other materials used in the various branches of that department, including gas examinations by many photometric stations distributed over the city, and necessarily located where the gas supply from the various sources could be most advantageously obtained.

The laboratory of the Board of Health conducted the examination of water and all other examinations which are strictly within its jurisdiction.

It would lead too far to narrate all the details of the workings of, and results accomplished by, the two last-named laboratories, but it may be of interest to know that in total, there are some twenty-six small laboratories owned by the City of New York.

Excepting such subsidiary laboratories as mentioned above, it is obvious that much analytical work performed was being duplicated and favorable or adverse results were not available to the city at large, not even to those officials who could apply such knowledge to the benefit of the taxpayer.

For the purchase of supplies for the various departments and public institutions alone the City of New York expends approximately twenty million dollars per annum. These materials are bought either under contract or in the open market, mostly under rather vague and inadequate specifications, leaving to a great extent their acceptance or rejection to the judgment of an individual.

It was recognized that these specifications should undergo a thorough revision and modification. To this end, a Committee of Standardization, consisting of the mayor, the comptroller and the president of the Board of Aldermen was elected by the Board of Estimate and Apportionment. This committee in turn appointed a commission on standardization, for the purpose above stated. The writer was selected as one of the members of this commission.

In the very initial steps taken by the commission on standardization to modernize the specifications for supplies, and especially

to incorporate reasonable physical and chemical requirements by which the quality and components of these materials could be described and deliveries controlled, the co-operation and advice of a city-owned chemical and physical laboratory was found to be an unavoidable necessity. This led to the creation of the Standard Testing Laboratory by the Board of Estimate and Apportionment, in the spring of 1911, for the following purposes:

1. The testing of samples of all kinds of general supplies purchased by the City of New York for the use of the various departments, and for the purpose of securing a proper audit of all claims therefor.

2. The testing of all materials used in construction work and in the laying and resurfacing of pavements, roadways and sidewalks in the five boroughs of the greater city.

3. The carrying on, concurrently with the routine of general testing and along specific lines of the city's needs, of such research work as will give the various city departments the benefit of the best available scientific knowledge, worked out practically along definite lines suggested by the routine of general testing, as indicated herein.

4. The simplification of the work of auditing and inspecting claims for supplies and materials furnished the city under properly drawn specifications, prepared by the Commission on Standardization and promulgated by the Board of Estimate and Apportionment, for use by all city departments. Co-operation in preparing specifications and in auditing and inspecting claims for work done and supplies furnished thereunder, so that the city shall, by the faithful carrying out of all specifications, receive full value for money expended.

5. The gradual evolution of uniform methods and standard tests of all supplies and materials purchased for city purposes, and the promulgation to all city departments, by means of monthly bulletins, or otherwise, of the results of such tests, and the research work based thereon. The object of the dissemination of this information would be to enable city departments interested to know fully and accurately the results in efficiency and economy of the general practices prevailing and the experiments made by every other department. This would prevent mistakes made by one depart-

ment from being repeated in others, as at present, and make methods by which valuable results are obtained in one department available to all others. Under the present system each department is permitted to work independently, in comparative ignorance of what is being done by other departments.

6. The maintenance of records, showing the relative life and relative good, or bad, qualities of all materials used by city departments in construction work, especially of materials used in the laying of pavements and sidewalks, and in the making and surfacing of streets and roadways with macadam and road oils, wood blocks, asphalt, granite sets or other materials. These records to be so kept as to inform departments in charge of such work, not only as to the best and most suitable materials to be used, but to demonstrate, from actual tests of such roadways and sidewalks during a course of years, the reasons for their durability or lack of durability; information of this character to be disseminated from time to time in monthly bulletins, or otherwise, for the information of all city departments.

7. The furnishing to the corporation counsel's office of such technical data, taken from the results of tests and from the official records of such tests, as might be required from time to time, to protect the city's interests in legal actions for damages involving materials and supplies furnished to, and work done for, any city department. At the present time large amounts of money are annually expended for expert services and testimony in such actions for damages. It is submitted that such services and testimony could be furnished by the staff and official records of a standard testing laboratory, in a manner and with a completeness which would more efficiently and far more economically protect the city's interests than they are at present protected in all such legal actions.

Since its establishment the Standard Testing Laboratory is in temporary quarters in a loft building, corner West Broadway and Franklin Street, occupying the very limited space of only three thousand square feet. Its personnel is made up, at the present time, of a director, five chemists, seven coal samplers, also acting as laboratory helpers and cleaners, one clerk and one stenographer. Of the above staff, two chemists and four coal samplers have been added since January 1, 1912.

The new quarters of the Standard Testing Laboratory of the

City of New York will be located in the New Municipal Building, corner of Park Row and Centre Street, now in course of construction, and the new laboratories, when completed, promise to be the most complete and up-to-date institution of its kind in the United States, covering floor area of approximately 35,000 square feet. The planning and designing of this equipment is being done by the writer, in conjunction with the architects of the New Municipal Building, under the supervision of the Commissioner of Bridges, who has charge of its construction.

From June 19 until January 1, 1912, the Standard Testing Laboratory completed and reported upon 580 chemical and physical examinations of over seventy different kinds of materials for eighteen different departments of the city government, of which 418 samples were acceptable, and 162 did not meet the requirements.

Since January 1, 1912, four departments have been added, and, judging from the variety of materials submitted, it may be inferred that the variety of materials submitted for analyses will exceed two hundred during the present year, still leaving a vast amount of additional samples of materials of construction and supplies to be taken up as soon as the new quarters can be utilized and the necessary staff procured.

It is not the object of the writer to give any detailed statement as to results accomplished so far by our relatively small establishment. However, it may be of more interest to dwell upon the subject of organization and efficiency secured through the united efforts of the staff of the Standard Testing Laboratory, as it exists at the present time, without making reference to future developments.

Efficiency in a laboratory is produced by the capacity of the staff, application of proper methods and the adoption of modern appliances.

The selection of an efficient staff, although sometimes hampered by civil service regulations, should be considered the criterion in securing efficiency in a laboratory.

It is unquestionably preferable to employ chemists who are graduates in chemistry of recognized institutes and universities, and who have had a few years' experience in both analytical and industrial chemistry. Teaching in the numerous universities and schools of technology, in strict adherence to the established methods and theories of the individual instructors, tends to impress upon the

fancy of a student, and is apt to create in him a liking for one or the other branches of chemistry or its allied sciences, and as a rule he is apt to carry this inclination through all his professional career. This tendency leads to specialization in a line which the young man is more or less fond of and competent in, and it is very important, in the estimation of the writer, to concentrate the activity of such a man to this very sphere of specialty, because the field of chemistry is so large that it would be folly to expect any person to be proficient in or control the immense stretch of that science.

As a consequence, it is advisable, as far as permissible, to accumulate talent from as many schools of recognized standing as possible.

The clerical force in the Standard Testing Laboratory takes care of the commercial end, keeps all accounts, attends to all pay rolls, orders, time and other records, files and correspondence, entries and disposition of samples submitted for tests.

The selection of a competent stenographer with good schooling is quite important, as most of the correspondence is of a technical and scientific nature, and delay and repetition of work is caused if the stenographer has to consult the dictionary too frequently.

In the labor class of the Standard Testing Laboratory, are the coal samplers, under the immediate charge of a head coal sampler. They are thoroughly trained to take all the coal samples for testing, according to established rules. When not actively engaged in obtaining samples of coal, or immediately after their return to the laboratory, they are required to prepare the coal samples for analysis, clean glass apparatus and other laboratory utensils. They are also instructed to make minor physical tests such as flash point determinations, how to set up and take down distilling and extracting apparatus, and to perform many other duties which facilitate the work of the chemists.

Technical advice to the Commission on Standardization of standard specifications for supplies forms an important duty of the Standard Testing Laboratory. In order to obtain supplies of good quality in the open market at a fair value, and also to provide free competition, the specifications must be framed in such a way as to admit any commercial article of good quality with the exclusion of adulterants. It is often the case that the manufacturer or dealer is scared off by specifications which contain the composition require-

ments of the materials as determined by chemical analysis, and of which the ordinary layman has little or no knowledge. The necessity of having such requirements is, however, obvious, and the method adopted by the Standard Testing Laboratory in that respect, and hereinafter described, appears to have the approval of the honest contractor. For instance, in the preparation of specifications for olive oil, eight different samples of well-known brands of this material were obtained directly from the various importers or dealers. All of these samples were analyzed at the Standard Testing Laboratory and found to be pure commercial olive oil. The results of the analyses were tabulated together with the various trade marks of the oils, and the specifications so arranged as to admit all of these oils, which, as stated above, were all found to be unadulterated. When the importer or dealer was shown the analysis of his own oil, together with those of his competitors, and convinced himself that the specifications therefor admitted all of the eight brands, he readily agreed to submit a bid. Had this method not been introduced, he would never have made a bid under the specifications, and the city would be forced to pay a higher rate. Wherever possible, this scheme will be carried through in the future preparations of all specifications for supplies.

In order to keep the Finance Department posted as to the analytical results obtained by the Standard Testing Laboratory, a copy of each report is submitted to the inspection division of the finance department, which, upon receipt of an adverse report, takes immediate steps to stop payment. The head of the department from which the material analyzed emanated, as well as the Commission on Standardization, and the commissioner of accounts, who has temporary charge of the Standard Testing Laboratory, receives a copy of each report.

Owing to lack of facilities, a monthly bulletin cannot be published before the staff of the Standard Testing Laboratory is sufficiently increased. The benefit derived from the publication of laboratory results obtained will certainly be appreciated, not only by city officials, but by the public at large. The composition of commodities used in most households, which are sold to the public with enormous profits to the unscrupulous manufacturer, should be made known, and the public should be warned. A material, for instance, submitted a few weeks ago to the Standard Testing Labora-

tory by the inspection division of the finance department, and used in one of the city departments, for a dust preventive in sweeping floors and carpets, proved, upon analysis, to be composed of sand, sawdust, a small amount of calcium chloride, and a trace of naphthalene. This material is sold at ten cents a pound, while it can be produced in hundred pound lots for less than thirty-five cents.

Other methods producing efficiency in the Standard Testing Laboratory are the standardization of methods of taking samples for tests, such as coal, soap, paint, etc., a system of records of all kinds, standard forms for reports and notifications, and a filing system for reports. Standardization of the methods of analysis is another factor which produces efficiency in the Standard Testing Laboratory.

The Director is in continual touch with the chemists and every method of analysis to be employed is thoroughly discussed, and, when once established, deviations therefrom are only permissible with his knowledge and consent.

Just as important as the standardization of methods, to produce efficiency in the Standard Testing Laboratory, is the installation of the most up-to-date appliances and labor-saving devices.

The latest form of electrically heated and controlled oven for drying, etc., has been installed. The thermostat of this oven keeps the temperature constant to within a half degree. By means of this piece of apparatus, evaporations and drying operations, which formerly took from two to three days' time, can be made over night.

Advantage has also been taken of the fine control of temperatures obtainable by means of electricity in the installation of a water thermostat whose temperature is electrically controlled. This type of thermostat, a recent invention, will keep the temperature of the water contained in it constant to one two-hundredth of a degree. The apparatus is invaluable in the taking of specific gravities of liquids, a frequent and important determination.

Another labor and time-saving device is a large electrically-driven centrifuge, with a variable speed up to 2,500 R. P. M., regulated by a speed-regulating rheostat. The head of this machine has receptacles to hold anything from a test tube to a 500 cc. bottle, including separatory funnels. It is also provided with a steam jacket and a revolution counter. The advantages of a motor-driven large centrifuge are so well known that an enumeration of the frequent

instances of application appears superfluous. In order to save labor and time in the process of obtaining representative samples of coal from a cargo, a power-driven coal crusher, with a capacity of six tons per hour, mounted on a motor truck, has been added to the equipment of the Standard Testing Laboratory. Other modern, motor-driven, crushing, grinding and sifting machinery installed at the laboratory, added considerably to its efficiency. A vacuum drying apparatus is employed in the preparation of coal samples for analysis. A complete set of standard apparatus for the physical, microscopical and chemical examination of all classes of paper has also been installed, and is being constantly used. All the thermometers used are either certified instruments or they are calibrated and corrected at the laboratory with a standard normal thermometer. The same rule applies to viscosimeters and other instruments of precision. Titration with normal solutions, can be performed independently of sunlight, owing to the fact that the titration is done over milk plates set in flush with the top of the titration table, and illuminated from below by tungsten lamps. Much time is wasted if the chemist or physicist uses the ordinary arithmetical methods. Logarithms, ordinary and chemical slide rules, and calculating machines have superseded plain arithmetic at the Standard Testing Laboratory. It would be too lengthy to mention all the other automatic and labor-saving devices used in connection with performing extractions, evaporations, etc., which are mostly done over night.

Only few laboratories in this country visited by the writer offer the analyst any devices of safety or provide for proper ventilation and personal comfort. The efficiency of a laboratory can be increased by proper up-to-date ventilation and the installation of safety devices such as showers properly located, and asbestos capes in case a man's clothing catches fire, etc. There is ample provision made in the plans for the new Standard Testing Laboratory, and owing to superior arrangements throughout, it is hardly possible to predict how much more this new institution will excel the old one in "efficiency."

In summarizing the various duties to be performed by a standard testing laboratory to secure efficiency, the following results are to be achieved:

Preparing efficient specifications.

Assisting in efficient inspection of goods delivered.

Ascertaining the most efficient materials for use in construction or supplies for consumption.

Observing and experimenting by research or otherwise, the serviceability of materials; as for example: oils, asphalts, paints, etc.

Collating, filing and having available for reference precise information regarding the physical and chemical characteristics of materials and supplies, with a view to determining the most suitable articles of each kind for the purpose required.

Arming the city with expert testimony and expert information to defend the various suits brought by disgruntled contractors in the way of construction work or general supplies.

THE PROBLEM OF SECURING EFFICIENCY IN MUNICIPAL LABOR

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With the present trend of public opinion strongly in favor of economic improvement in municipal as well as in private affairs, it is not surprising to note the current popularity of the expression "efficiency." Except to the few who have made a study of the subject, the extent of municipal inefficiency is almost unbelievable. Lacking the measure of efficiency in private enterprise, there can be no conception of the actual inefficiency of public service.

The average person is familiar with but few of the innumerable forms of municipal inefficiency. The public frequently encounters evidence of inadequate service in the way of filthy streets, disintegrated pavements and obstructed sewers. Less frequently may be observed extravagant performance as evidenced by the snail-like action, or total inaction of individuals or large gangs engaged in sweeping streets, repairing pavements or cleaning sewers and catch-basins. These familiar instances represent different manifestations of only one form of the evil, namely, inefficiency in the control of work ordinarily performed by municipal day labor.

Within the last five years the writer has had occasion to investigate for the Commissioners of Accounts in several of the boroughs of New York City, and for the Merriam Commission in Chicago, certain aspects of the efficiency of municipal labor. These investigations contemplated only a relative determination of efficiency in conclusive form. The procedure was extremely simple in theory and consisted in arranging for the accurate measurement of self-demonstrated inefficiency. First a series of secret observations of the labor forces was conducted. Later a duplicate series of observations, covering the same forces, was made openly. Careful records were kept in both cases. Performance under the first series obviously represents normal efficiency, whereas the critical inspection of the second series might be expected to develop that degree of efficiency

easily possible of attainment. Thus by comparison it was ascertained that these municipalities normally suffered a loss of efficiency in the forces examined varying from 40 per cent to 70 per cent. This, of course, represented virtually nothing except wasted time. While these investigations covered only a relatively small portion of the total labor employed in all departments of either city, it may be stated with the utmost assurance that the average efficiency of labor in any large municipality will not at the present time exceed 50 per cent.

The significance of this statement will be more apparent when the above percentage is applied to total expenditures for labor. For instance, the annual labor payroll of New York City approximates \$17,000,000. A loss in efficiency of fifty per cent means, therefore, a yearly waste of \$8,500,000.

In the business world success is frequently measured by the ability to learn and adopt the more effective methods of competitors. It is commonly asserted that per diem work conducted by a municipality is less economical than similar operations of its competitor, the private contractor. There is, however, no insuperable obstacle to prevent reduction of the disparity in cost to a negligible quantity, although perhaps not immediately. It should then be advantageous to compare the conditions which affect the efficiency of both contractor and municipality and apply the knowledge thus gained to municipal operations.

In the majority of the larger cities the work upon which day labor is employed includes a wide variety of functions. These functions, segregated according to a more or less natural classification, are usually exercised by separate departments or bureaus of the municipal government. As it appears in any such organization inefficiency may be divided into two general classes. First, inefficiency due to circumstances over which the administrative head of a department or bureau has no control, and, second, inefficiency due solely to his action or inaction.

Under the first class, the principal items are inefficiency due to

- (1) Procedure required by civil service laws and regulations.
- (2) Procedure required by fiscal authorities.
- (3) Conditions imposed by other legislation or regulation, either state or local.
- (4) Influence exerted by political interests.

In discussing the first of these items, it should not be inferred that a criticism of civil service principles is intended. It is rather that the application of those principles as normally made has become a serious handicap to efficiency. Through well intended efforts to prevent the appointment of undesirable employees and the removal of competent employees as practiced by the "spoils system" of partisan politics, proper consideration has not been given to the more important question of securing the appointment of desirable employees and expediting the removal of incompetent ones. The practical results of applied civil service are disheartening in the extreme to a municipal official anxious to secure efficiency.

The average competency of municipal labor selected by civil service methods is considerably lower than that employed by private interests. This is more noticeable in the class known as skilled labor. Here while the wages in public and private service are quite uniform, the competitive examination together with the accompanying uncertainty of immediate employment acts as a strong deterrent to those whose competency and consequent acceptability may be quickly determined by trial service in a private concern. Moreover, the so-called "Preferred Lists" of the civil service seriously affect the efficiency of municipal work. For the enlightenment of the uninitiated it may be explained that the preferred list is an institution designed to provide for preferential re-employment of individuals who have been laid off through reduction in force. Such reduction is naturally made by the dismissal of the least competent employees. Again, owing to the unpleasant and sometimes extremely difficult task of removing incompetent and undesirable employees on charges, it is not uncommon to find the superior official shirking his plain duty by allowing the names of such employees to be placed on the preferred list. Subsequent reappointment then becomes a certainty.

The titles of civil service positions constitute a further barrier to efficiency, since no employee may be legally utilized to perform duties other than those specified by his title. The significance of this factor cannot be appreciated without a full knowledge of the existing nomenclature of municipal labor. The absurdity of this provision from a practical point of view is self-evident. It results from an attempt to correct the abuse of favoritism in the assignment of duties. The effect produced is that of the application of a

remedy to a symptom of disease rather than the eradication of the fundamental cause of its existence.

Regulations governing the employment of veteran soldiers and firemen are another stumbling block. The physical efficiency of a man who, to qualify as a civil war veteran, must be at least 60 years old, cannot be great, yet under the law it is obligatory to appoint him in preference to other eligibles, and it is extremely difficult, if not impossible, to secure his removal on the ground of physical or mental incompetency. The effect of his incompetence on the efficiency of his associates who receive the same wages is so serious that it would be far better to retire him on a pension designated as such.

The second obstacle to efficiency to be considered is the procedure required by fiscal authorities. Up to the present time, to all intents and purposes, economy has been considered synonymous with efficiency in municipal affairs. Conservation of funds has been the only measure, if any, that has been applied in judging efficiency. Expenditures have been practically uncontrolled except by the limit of departmental appropriations. This has naturally resulted in impairing the adequacy of available funds by abuse of expenditure privilege. To improve these conditions there has been instituted within the last few years in a number of cities, notably, New York and Chicago, a form of financial control known as the segregated budget. Briefly, the segregated budget provides for the purchase of labor, material and equipment by detailed appropriation of funds for definitely specified purposes. Every such appropriation is supplemented by a supporting schedule fixing the amount of each item of contemplated expenditure. No appropriation may be exceeded and no change in contemplated expenditure may be made without the consideration and approval of the fiscal authorities who originally established the amounts. The tendency of the segregated budget is to centralize, unduly, in fiscal authorities, the control of administrative detail greatly to the detriment of the efficient performance of work.

As applied to labor forces, this form of control not only arbitrarily fixes the number of incumbents and the rate of per diem wages for each grade of service, but makes impossible an increase in the number regularly employed or a modification of rates for the class or for the individual employee without the censorship of the highest city officials. As will be seen, this allows for no exercise of discre-

tion by the administrative head of a department or bureau, either in rewarding efficiency or penalizing inefficiency.

Like many other efforts to apply corrective measures to existing abuses of public service, the segregated budget is an attempt to ameliorate the evil by placing severe restrictive conditions upon the manner in which public moneys may be expended. That the fallacy of the theory has not become widely evident is due to the fact that those responsible for its introduction are primarily concerned with the financial side of municipal operations, and fail, as do most of the public, to comprehend that what is needed is control over results secured by expenditure of public moneys, which involves a consideration of work values.

The third obstacle to efficiency is to be found in special legislation. The municipality generally pays from 20 per cent to 50 per cent more for common labor than does the contractor. The hours of daily service are also shorter. The responsibility for this condition lies with our legislative bodies, either state or local, whose enactments have undoubtedly been inspired by considerations of political expediency. Any class rate of wages, either high or low, fixed by statute or resolution, without reference to ability or performance, is bound to foster inefficiency.

In the average municipality there is a strong tendency to segregate work strictly along functional lines, and assign a separate jurisdiction for each. This is frequently governed by charter provisions. Up to a certain point segregation may be desirable, but beyond that point it becomes unwise. For example, it will generally be found that, in the same territory, repairs to highways, cleaning of highways, repairs and cleaning of the sewer system and maintenance of the water supply system are each under the jurisdiction of a separate department or bureau. In each of these four functions there are well defined activities that require an entirely different procedure. But note also that in each of these same functions are included other activities which dovetail into one or more of the other functions. Here there is bound to be lack of co-operation, and consequent friction in the performance of work, where the jurisdiction is divided. To illustrate: A street cleaning department may use the sewers for facilitating snow removal. Care is not exercised in separating debris, and the sewer becomes blocked. No concern is felt by the street cleaning department. A lazy street sweeper disposes of a pile of

rubbish by pushing it into the inlet of a catch basin. It costs three times as much to remove it from the catch basin as from the street surface. Refuse from catch basins and sewers as well as from highway repairs and street sweeping in the same area are hauled to dumps by independent transportation forces. Water from hydrants is used for sprinkling streets, flushing pavements and sewers and repairing macadam highways. Careless use results in waste of water, frozen hydrants and remarks from the water department. A water main bursts, washes out an underground channel, the sewer and the street surface cave in and three separate forces are called to the rescue. Part of the maintenance of macadam and dirt roads runs so close to the function of street cleaning as to make it impossible to tell where one ends and the other begins. The problem of jurisdiction is not a simple one to solve, but in its present form unquestionably induces great inefficiency.

The fourth cause of inefficiency lies in the influence exerted by political interests. The average caliber of municipal labor is always lower than should be attracted by the higher wages paid. It seems quite possible that this may be occasioned by the disinclination of ambitious and competent labor to remain in a service where, as will be seen later, recognition is based largely if not entirely on political considerations.

Of all the factors which are not within the control of an administrative official, there is perhaps no single one which militates more seriously against municipal efficiency than the effect of political influence on the discipline of a labor force. When any employee, be he laborer, foreman or superintendent, is in a position to do as he pleases and snap his fingers in the face of his superior officer if rebuked, the efficiency of the entire force to which he may be assigned is gone. It is no uncommon occurrence for a foreman to suspend a laborer, request his discharge, and then be instructed to reinstate him and "leave him alone." After such a performance how can it be expected that the foreman can compel the obedience of the remainder of his force?

The appointment and retention of incompetent and undesirable employees can generally be traced to political influence. The uncertainty of tenure in the higher positions, due also to this reason, has a direct effect on the efficiency of all subordinate forces. The employment of labor greatly in excess of actual needs may be ascribed to the same cause. Especially is this true in respect of foremen and assistant foremen.

Vehicular service, when hired, is an especially fruitful field for the politician. The manifestations of inefficiency appear in the form of decrepit horses, dilapidated vehicles, untrustworthy drivers and insubordinate service.

These are some of the extraneous difficulties which face the official who is honestly anxious to secure efficiency from his labor forces.

With regard to the causes of inefficiency which fall within the control of an administrative head, a complete enumeration would produce a lengthy catalogue. Confining attention to a somewhat general classification, it may suffice to mention:

1. Inefficiency in the supply, distribution and use of material, plant and equipment.
2. Inefficiency due to lack of knowledge concerning work conditions and requirements.
3. Inefficiency due to lack of predetermination in the assignment of work.
4. Inefficiency due to improper organization of force.
5. Inefficiency due to improper methods and unsystematic procedure.
6. Inefficiency due to lack of discipline.
7. Inefficiency due to lack of standards by which performance may be judged.
8. Inefficiency due to inadequate and inaccurate records of performance and conduct.

It is obvious that the output of productive labor will be directly affected by the efficiency of supply, distribution and use of material, plant and equipment. Municipal corporation yards and shops are, as a rule, improperly located, and, in addition, are paradoxically both insufficient in number and excessively numerous. To illustrate: In the City of New York, some five or six departments, in some cases bureaus of the same department, each maintain separate yards in practically the same territory, and yet the yards of any one department are generally insufficient to serve effectively its needs in that district.

Almost without exception municipal yard and shop equipment, as well as field equipment, is sadly inadequate as well as antiquated. Supplies which should be always in stock are suddenly found to be entirely wanting.

Information regarding the status of current work is sadly deficient. There is scarcely a single maintenance bureau that does not depend largely, if not entirely, on its "complaint book" to provide work for its gangs. The length of the complaint list is often an excellent index of efficiency. In practically no municipal department is information concerning the work to be done or the conditions that will govern its performance systematically ascertained and advantageously utilized. Instead of daily assignment of carefully predetermined work, a foreman is given a certain territory and told to "keep it in shape," or handed a bunch of complaints and told to "fix 'em up."

Municipal labor forces are as a rule very poorly organized. The proper relation between labor and supervision for a given class of work is seldom maintained. A foreman may be found in charge of two or three men, where the effective prosecution of the work demands at least twice that number. Again, it may be found that the foreman has a force far greater than can possibly be used to advantage on the work in hand. Both of these conditions cause a restriction of output. Whenever the current volume of work is greater than this restricted output, the neglected work becomes a source of public complaint.

It would be exhausting to attempt a delineation of faulty methods and procedure of municipal work. They are all due to the fact that there is no penalty or premium on performance.

The most common, and at the same time, most serious loss of labor efficiency is due to waste of time. Lack of discipline is responsible for this condition. No administrative official can truthfully deny knowledge of the enormous waste of time, wherever it may occur in his labor forces, without acknowledging, thereby, his utter incompetence.

Without a knowledge of the results that ought to be obtained as an equivalent for the time and money spent, the municipality cannot judge of the efficiency of its employees. Nevertheless, standards of work for purposes of comparison have rarely been established.

The lack of accurate work records prevents such a comparison even if standards be established. The difficulty of securing accurate records of performance is surprising. Unless carefully watched, and sometimes even then, foremen will exaggerate in reporting their

actual accomplishment, and, what is worse, the proper check is seldom established. More often than might be expected, the efficient performance of work is subordinated to accounting convenience. Systems of records planned to meet financial needs are frequently put into force without considering the effect upon the work procedure. In fact, it is quite generally true that municipal records fail to reflect the very thing which is the cause of their existence. Labor, material and equipment are never purchased, except for the reason that by their use some desired result may be accomplished, yet in municipal records the relation between results and expenditures is hardly ever shown.

A contrast to the above inefficient features of municipal work may be drawn by considering, in brief outline, the corresponding conditions surrounding the private contractor's work.

The contractor is more or less of a specialist, at least for the time being, in that the scope of his operations is generally not as extensive as that of the municipality. His problem, as a whole, is therefore one of lesser magnitude. He does, however, what the municipality does not—he considers his problem as a whole as well as by separate features. He studies his organization, plant and equipment as an entire unit, which must be designed to produce effective results by co-ordination of its different parts. He is not handicapped in employing labor by any civil service restrictions. He strives to get and keep the most competent, discharging at once those who cannot make good. He measures the competency of his labor by the results produced. In the event of an increase in force, he is under no obligation to re-engage former employees, although, as a matter of fact, he strives to if they have served him well. He often allows his subordinates to "hire and fire" their own men, but holds them for results. The employee is expected to do whatever may be necessary and expedient, irrespective of his title. The methods of financial control used by the contractor are relatively simple. On account of the fact that he is paid for results, he requires results in return for expenditure and maintains a control accordingly. All of his expenditures are paid out of one fund—his bank account—but he segregates, in great detail, the record of expenses in order that he may know exactly the unit costs of his work. These he can compare with his previous experience and with the price which he receives for his work. In the matter of wages paid, the contractor, while by no means unrestricted,

has still a much wider latitude than the municipal official. He can at least offer a bonus for increased output.

The tendency of the contractor is to strain the relation between wages and output to the breaking point in one direction while the municipality allows it to be strained to nearly the same degree in the other. Neither policy will produce the best efficiency; but the one adopted by the contractor has the advantage of economy.

The contractor may feel the deleterious effect of political influence, but in such case, there is always a *quid pro quo* whereby he gains, indirectly, at least, some advantage.

In undertaking work the contractor studies in advance the conditions to be met and provides for the supply and distribution of material, plant and equipment in a way to facilitate to the utmost his operations. Time is with him a most important consideration and he therefore eliminates causes of delay wherever possible. His discipline is strict; he permits no waste of time that he can prevent. That discharge will promptly follow the discovery of loafing is well instilled into the minds of his employees by knowledge born of experience. He invests without hesitation in labor-saving plant and equipment whenever he can be assured of a reasonable saving thereby. He utilizes his forces in the most advantageous manner by shifting them from one class of work to another as desired, and he does not functionalize his work beyond the point where it is effective. He organizes the units of his force to produce the best economic results. He distributes to these the maximum amount of work, employing the minimum number of units consistent with the progress desired. He knows how much work a given force should be able to do in a given time and watches to see that the record of performance fulfils this condition. The records cannot be falsified without his knowledge, since he is paid for results as measured by the other party to the contract. This is an important fact to bear in mind.

If the fiscal department of the average municipality should concern itself with the results of its per diem labor performance to the extent that it does with the results of contract performance, a vast improvement in efficiency would be inevitable.

Conceding that the contractor maintains an advantage over the municipality on practically every point mentioned, what is the compelling force that underlies his achievement, which is lacking in the municipal government? All of the conditions inducing muni-

eipal inefficiency spell but one thing to the intelligent contractor. That thing is certain and sometimes serious personal cash loss. On the other hand, the elimination of the conditions which foster inefficiency means to him equally certain personal profit. Note well the situation—personal responsibility—only two possible results: certain reward for efficiency, certain penalization for inefficiency—behind, the prod of financial loss; ahead, the incentive of financial success. The contractor can always translate the profitableness of his operations into dollars and cents. The municipality cannot, until the value to the community of public convenience, comfort, safety and health can be determined on a financial basis. The people in their capacity as sovereign cannot therefore realize the financial burden that they invariably impose upon themselves in their capacity as subject, by permitting inefficient performance on the part of their public servants. Municipal officials having always on this account the opportunity to shift the burden of loss due to inefficiency upon the ignorant public without the likelihood of discovery, feel no such personal concern for their actions as does the contractor.

The remedies then are obvious, at least in their general statement if not in the actual method of application:

1. Provide a practical and effective method of selecting competent personal service in every grade.
2. Establish a jurisdiction that will facilitate the performance of all inter-related functions.
3. Define individual responsibility clearly and insist on strict accountability.
4. Institute strict disciplinary measures.
5. Establish the standards to be attained.
6. Permit great latitude of administrative discretion.
7. Improve individual performance by educational methods.
8. Provide an accurate record of individual accomplishment.
9. Measure ability by results of performance.
10. Make the punishment for failure severe.
11. Make the reward for success attractive.
12. Publish the comparison of actual results with established standards.

Does this seem theoretical? Does it seem impractical? In 1910 the Commissioner of Accounts of New York City, at the invita-

tion of the Borough President of Manhattan, undertook the reorganization of a part of the maintenance force of the Bureau of Sewers. Its organization at that time consisted of 24 sewer cleaners and 38 horses and carts, divided into 12 gangs each in charge of a foreman. The cost of cleaning sewer basins approximated \$4.00 per cubic yard. Nearly all of the causes herein cited as producing inefficiency were found in greater or less degree. The work of improvement was conducted as far as possible along the lines above indicated. Within a few months the number of gangs and foremen was reduced from 12 to 4, the sewer cleaners from 24 to 16, and the horses and carts from 38 to 14. The total output was increased 100 per cent, wages increased 15 per cent and a saving in annual expenditure effected amounting to \$35,000, or 43 per cent. The average cost of cleaning per cubic yard was reduced from \$4.00 to \$1.45, with occasional costs as low as \$0.76. The net result was an increase in efficiency of 275 per cent.

Similar work of improvement, but on a much larger scale, has recently been inaugurated by the same Commission co-operating with the President of the Borough of Queens, New York City.

For several years the Bureau of Street Cleaning, Borough of Richmond, New York City, has been steadily improving in efficiency by the application of these fundamental requirements.

The entire problem of securing efficiency with municipal labor is one which requires much study and patient effort, study of minute detail as well as broad principles, study of human nature as well as individuals. Good government reform might well take a lesson in efficiency from the spoils system of partisan politics with its prompt personal rewards for service rendered.

EFFICIENCY IN HIGHWAY ADMINISTRATION WITH SPECIAL REFERENCE TO PAVEMENTS

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The application of scientific methods of management to a department of highways is not a new problem. Until very recent years, however, definite results derived from such a type of administration have been practically unknown. The men who have been placed in charge of the streets and highways have often been grossly incompetent and in some cases dishonest. More often absolutely ignorant aldermen and other city administrators retained the decision covering all such matters for ulterior motives not hard to guess. The necessity for a remedy and the remedy itself for such conditions are so apparent that dishonesty is now rapidly being supplanted by integrity and incapacity by at least a desire to learn. Even in the routine inspection the excessive amount of technical detail involved in the proper maintenance of pavements makes it imperative that the administrator be not only an engineer but also one who can appreciate the value of systematic reports and records. That is, he should be an efficiency engineer. How to make scientific efficiency result from the good intentions of the highway administration is the problem to be discussed.

For every engineer of highways or commissioner of public works there are two main problems in connection with the maintenance of pavements: first, the original pavement—its selection and construction, with the attending financial problems; second, the maintenance of the pavement after it has been accepted from the contractor, with the accompanying difficulties of tax budget appropriations to cover maintenance and inspection costs, and the very important question of the proper time to repave. Of these two, the maintenance proposition offers the more serious difficulty, but in order to follow the actual time sequence the original contract will be considered first.

Independent of whether the pavement to be constructed is a complete repaving or whether it is an original construction, the questions which should come to the mind of the highway administrator are identical so far as the selection of the kind of pavement is concerned. What is the traffic—how much, what kind, what percentage is horse drawn, what percentage is motor? What is the street grade? What is the character of the street—residential, tenement, manufacturing, shopping, occupancy by car lines? What has been the history of the street and what is its probable future? Finally, how much money is available? The question of the capital outlay should be made a point of minor consideration, not that the expenditure of money is of no consequence, but too close economy on the original financial side of pavement selection is in the end likely to result in no economy. Unfortunately, this statement can be impressed on the average taxpayer only with the greatest difficulty. It has been proved too often, however, in too many cities, to admit of more than a reasonable doubt.

With traffic records as a basis and a decision made as to the intended use of the street, whether for a boulevard or for general trucking, etc., the administrator must next select the general class of pavement which will satisfy his conditions. For heavy traffic on grades, a form of stone block; for the same kind of traffic on a more nearly level street, wood block; for lighter traffic in the residential district, a form of asphalt; for still lighter traffic on a park boulevard, a bituminous macadam.

A point of supreme importance which can be considered here only in the most general way, but must never be overlooked, is the preparation of proper specifications. Recently, attempts have been made by the government and by associations of engineers to unify and codify the experience of all highway engineers throughout the country and make it available for others, in the form of standard specifications. It is indeed a weak minded and narrow administrator who will rely solely upon his personal experience or the experience of his own city, in such matters; for by taking advantage of the mistakes and the successes of other municipalities, every city can be kept at the forefront. This is more nearly true in regard to specifications than to any other side of the pavement problem. Specifications prepared by associations of engineers whose integrity cannot be questioned are at the disposal of every highway department in the

country. It was an unhappy situation that, for some time, national highway associations and other municipal engineering societies often had behind their organization an ulterior motive. As a consequence small reliance could be placed upon their recommendations. But the advancing standard of the individuals who make up these organizations has materially raised the standard of the organizations as a whole, making them now invaluable to every highway engineer.

The contract and the specifications must be thoroughly understood by both the contractor and the contracting party, and the proposal for bids must be comprehensive. The courts in nearly every state demand this. Having once established a thorough understanding between the city and the contractor, specifications should be enforced to the letter. It is the right of every taxpayer to know that the specifications offered with the proposal for bids are being followed, and that the city is paying for no more and no less than what was asked for at the public hearing.

Preceding the payment of money comes the raising of money, which is variously accomplished by assessment, bond issue or tax levy. The financial problem in the construction of a pavement depends upon the conditions under which the pavement is being laid—whether the street is being improved for the first time or is being repaved, and what kind of pavement constitutes the improvement.

On original construction work the custom has usually been to assess the cost on the property benefited, but the proper distribution of an assessment is extremely complicated. In a purely residential district, where traffic is almost solely for the direct benefit of the adjoining property, an assessment of the whole cost of the improvement can be levied upon the abutting property without grave injustice. When, however, it comes to assessing upon the adjoining property the cost of a wide boulevard which will be used by the whole community, the injustice is obvious. Various compromises are effected in the different communities. Perhaps the most equitable one is to charge the abutting property with an arbitrary amount roughly corresponding to the cost of one serviceable pavement for a street of average residential width, allowing the property owner to make payment in as many as ten installments, if he so elects; such money to be credited to a paving fund originated by a bond issue for a term not greater than the extent of the deferred payments.

A number of states require that the assessment for any sort of public improvement shall not be greater than the actual increment derived by the property. This is, no doubt, an ideal theory, but just how to determine the exact benefit from public improvements is a question which has never been solved satisfactorily. In addition, the procedure offers many opportunities for injustice and dishonesty.

There are, however, two real objects in levying an assessment: (1) to distribute the cost of the improvement against the property benefited, and (2) to prevent automatically the laying of new and expensive pavements in absurd locations throughout the city. Consequently, even though assessments are often unfair to the individual, the city cannot afford to lose that protection. If but one assessment for paving is to be levied against each piece of property, even if the pavements on different streets are not identical, care must be taken in the preparation of the administrative code to insure that they shall be of one general class both as to wearing qualities and cost.

Repaving, particularly in the larger cities, cannot usually be considered a proper assessment charge. Neither is it a strictly proper item for the annual budget, owing to irregular expenditures. Under ideal administrative conditions, wherein equitable sums would be expended for repaving each year, the use of tax levy funds certainly would be justified. The scheme, however, is not compatible with the present policy of frequent administrative changes and the lack of standard pavement conditions. This difficulty could be largely overcome by the development of a detailed and studied plan for future paving work. When such a plan has been prepared, the lack of steady tenure in office by the chief administrator will not seriously affect the working out, if the following of the plan be made an invariable departmental policy. The failure of most cities to definitely outline future work indicates, for the present, the propriety of a bond issue. But while this may be the best method when properly conducted, it must be confessed that the issuing of bonds has often been a source of trouble.

In many cases enormous amounts of money for pavements have been unfairly distributed in the tax levy, owing to poor methods of financing bond issues. The tendency has been to issue bonds extending for a term much longer than the life of the pavement. Thus the community was called upon to issue additional bonds for repaving while still paying interest and sinking fund charges on a

dead pavement. Such a condition has been repeated as many as four times, the wear and tear being so heavy that repaving was often required before the original bonds were redeemed. Fifty year bonds have not been exceptional. The taxpayer was, therefore, carrying a yearly financial burden to which had to be added all of the actual maintenance cost. The cure is obvious—when bonds are issued the term should not exceed the life of the pavement.

A study of the situation seems to warrant the use of a ten year bond—a ten year serial bond, if possible. This may be too short a period for the smaller cities, but for the larger cities where the traffic is heavier and the wear and tear more rapid, the ten year period would surely be a step in the right direction. It must not be understood from this statement that pavements on an average do not last more than ten years. That, of course, is not true. But in the last few years of the life of a pavement the increasing cost of maintenance and the decreasing usefulness of the pavement make it unfair to distribute an equitable share of the original cost to the taxpayers of those years.

When patent pavements first came into general use, owing to the uncertainty in the minds of everyone as to their reliability, the cities in nearly every case required a long term guarantee from the contractor—a term which in some of the larger cities was longer than the average life of the pavement. Of course, this was absurd, and, in consequence, numberless abandoned contracts were thrown back on the municipality, and many paving companies went into bankruptcy. Then for a time, the attitude seemed to be that there should be no guarantee. This was probably a reaction too far in the opposite direction. Ideal specifications and inspection and the assurance of unquestioned integrity on the part of both the contractor and the contracting party would eliminate all necessity for any guarantee, but such ideal conditions are not yet attainable and, for that reason, it does not seem advisable at the present time to eliminate a guarantee entirely. Five years is long enough; probably a shorter guaranty period would be better.

The maintenance problem is one of detail, and on that account has become irksome to many an administrator, who prefers rather to deal with big figures and large items. Thus the control of maintenance has usually been relegated to subordinates who either did not know or did not care sufficiently about highway efficiency to

conserve the interests of the community. With the possible exception of the financing of paving work, which has already been discussed, more money has been wasted in maintenance than in any other division of highways. Maintenance combines the question of inspection and repair, embracing the wear and tear caused by traffic, cave-ins, public service corporations, departmental cuts, etc. It has to do with all kinds of pavements, and involves the question of whether repairs should be made by city gangs or by contract with paving companies.

The first step towards efficiency in maintenance is the installation of a comprehensive system of inspection. Of course there must be an assurance of accurate and honest inspection of workmanship in the original pavement and in all restored areas, but a basis for the location of repair gangs is equally essential. Such reports can be secured only from a system which will show the exact conditions existing at a definite date together with the history down to that point.

Preliminary inspection is a question of patrol of a given district. How many inspections are needed and how much ground an inspector can cover in one day are entirely questions of locality, of traffic, etc., and must be decided by each city for itself with direct regard to the district in question. There is no reason why the preliminary or patrol inspection of the streets should not be amalgamated with the patrol inspections of the other departments of public works. By decreasing the mileage which an inspector is forced to cover in a given period of time—at the same time increasing the scope of his duties by requiring not only reports on the condition of the streets but also on encumbrances, street signs, defective lights, etc.,—it will be possible to obtain more work per mile without additional effort and without imposing any hardship on the inspector. Greater diversity of reports will produce greater interest in his work and result in higher efficiency.

It is usually considered necessary to make a very clear distinction between the reports of wear and tear, and the reports of cuts, damage done from new buildings, cave-ins, etc. The reason for this is obvious from a financial standpoint. Wear and tear repairs are strictly a tax budget item, while repairs of cuts and other damaged areas, which have arisen by the specific act of the individual working under a permit or the like, are not so directly chargeable to the general

taxpayer. Such repairs should be paid for out of a special or trust fund made up from the deposits required on special permits issued to cover every damaging use of the highway.

Just how detailed a report should be required of the patrol inspector for wear and tear defects is largely a question of the condition of the pavement, or rather, what standard has been reached or is expected to be reached in the near future throughout the city. On great engineering construction work a most detailed inspection is required, but, unless the pavements have reached such a high standard that a wear and tear defect is an exception rather than a general rule, it would be cumbersome to require an individual report on every wear and tear defect every day it remains unrepaired. By properly educating the gang inspector to report explicitly the nature of the repair as well as the size of repair, the necessity for an itemized segregation of items in the preliminary reports is certainly not necessary.

To facilitate the routine office procedure, the preliminary inspection of each cut can be profitably reported upon an individual form. But it must not be forgotten in this connection that the less writing in the field the more work it is possible for the inspector to do. It is highly advisable to send from the office to the inspector a form filled out with as much information as possible and thus facilitate his work. He should be required merely to state that the rules and regulations of the department are not being violated in each instance, and to report the area and location of the cut. By making out this form in duplicate in the main office and retaining one copy, it is possible to set up a very simple "tickler" of the incoming reports of the patrol inspectors. To the above should be added enough supervision by reliable men to assure the official in charge that the reports of the inspectors are accurate and the outline of the system for preliminary inspection is complete. A certain amount of leeway must be provided for the reporting of fire-burns, cave-ins and areas damaged from unknown causes, also for the reporting of miscellaneous violations of the department's regulations, all of which are original inspections initiated in the field.

The next question is how to make use of the information contained in the reports from the patrol inspectors without establishing a routine so cumbersome that the overhead charges of the department become top-heavy. The first step is a system of accurate filing,

preferably by blocks and intersections, in turn grouped by contracts. A display map showing the locations of the gangs, and, by some simple means, the amount of yardage to be repaired within a given block, will prove of great assistance. For cuts and the like which are usually repaired on individual orders, a simple "tickler" file set to throw out all cuts remaining unrepaired at the end of the time limit specified in the contract will give information upon which to enforce the liquidated damage clause for such delay. If consistently followed, this process will assure prompt repairing in the majority of cases.

In formulating a system for inspection of the laying of pavements, particularly repair work, the assurance of adequate inspection at the paving plant is imperative. Good results never can be obtained from poor raw material, but the best possible material can be made useless by improper handling at the plant. These plant inspectors should be men with scientific training and could well be placed in close connection with the chemical laboratory.

This applies fully as much to a municipal paving plant as to that of a private corporation. In the smaller cities where it is not possible to obtain the continuous service of a paving company it is a great advantage for the municipality to establish its own repair plant in a small way. It has also been found from the experience of larger cities that it is possible to obtain good results from city repair gangs where those gangs were engaged on work not requiring highly technical employees or not involving special materials, the handling of which had to be left to technical men.

Inspection of repairs is a question of training the inspector. The absolute necessity for accurate reports both as to workmanship and measurements emphasizes the need for securing men whose honesty cannot be questioned. This latter question is no doubt a difficult one, but competent supervision will overcome it to a large extent. Some of the large public service corporations that deal directly with the paving companies in restoring cuts, etc., require that the reports of area restored shall be signed not only by their own inspector but also by the foreman of the paving company. This is a suggestion which need not be applied to municipal work if the contract between the city and the contractor provides that the city may at any time give direct orders, through its representatives, regarding repair work and may demand the dismissal of any foreman who is either

inefficient or dishonest. Next must follow the assurance that the reports received from the gang inspectors are accurate.

In connection with the training of a competent inspection force efficiency talks by the engineers of the department, explanations of specifications, the preparation of a comprehensive book of instructions prepared in such a manner that it can be easily understood by the inspectors, and all other such helps, are invaluable. Owing to the peculiar nature of the work, specifications for paving materials are of necessity complicated, and those for workmanship are broad and comprehensive, but lacking in detail. It is not possible to avoid entirely this complexity, but by proper instruction and by careful supervision it is quite possible to overcome the uncertainty in the non-technical minds of the usual type of inspectors, and foremen of paving gangs, as to just what is to be required of them.

Reports of areas restored can be very simple. All that is necessary is the location of the patch and a statement of the dimensions. Patches are often irregular, of course, and these dimensions must be taken from the nearest measurable figure. It is not advisable to have the extensions of areas calculated in the field. Greater accuracy at less expense can be obtained from clerks in the main office who know how to add and subtract and multiply, but who do not know the difference between good asphalt and poor concrete. Here again adequate supervision is imperative. The marking out of the areas to be restored and the reporting of the areas as restored should be made by the inspector who is with the gang. Some check over the economy in the distribution of repairs can be made by comparing the preliminary reports of the patrol inspectors as to area with the final reports of the gang inspectors. This, however, is not complete. Sometimes, considerable time will elapse between the preliminary report and the repairing of the defective area by the gangs, and just how much increase in defective area should be allowed for the given time can never be accurately estimated.

Whether or not to require a guarantee of the patches laid under a maintenance contract which has a life of but a single year has been a question considerably discussed of late. In order to enforce a guarantee it is necessary to plot the repairs made and to deduct overlapping areas laid during the course of the contract. Unless selected streets only be plotted, the plotting of repairs necessitates an enormous amount of drafting work, from which there is a considerable

question of any return on the investment. The net economy of this plotting work in the last two years on some of the most heavily traveled streets of New York has been less than five per cent, and if the general overhead charges were added to the cost of the plotting there is grave doubt whether the city would in any way be the gainer. Adequate inspection of material and workmanship and honest measurement really void the necessity of any guarantee period in a strictly maintenance contract.

One of the greatest difficulties in all cities is the lack of interest among the employees in the work they are asked to do. This is a general proposition and affects highways no more or no less than a number of other city departments. It is always a serious obstacle in the way of efficiency. Inspectors, who are usually in the \$900 to \$1,500 class of city employees, are not high grade men. The civil service lists are crowded with men looking for outside work with nothing more to recommend them than that they passed in some way some sort of an examination. How to overcome this difficulty is indeed a question. No one so far has been able to solve it completely, but the greatest step taken toward its elimination has been the establishment of efficiency records—records which the inspector should be given to understand will be used as a basis for promotion or discharge, something which they will be assured will be a public record of what they have done, and can be made either their best friend or their worst enemy. It is an incentive to work and an assurance that honest efforts will be rewarded. There are just as many ways to tempt a man to do right as to tempt him to do wrong, and the efficiency record is a chance to make good and to go on record as having done so.

Considerable success has been attained by different cities in making their own pavement repairs, including repairs to stone block pavement, telford, macadam and a great number of variations of a mineral aggregate with an oil binder, together with the well known sheet asphalt. In connection with either a municipal repair plant or repair gangs, the necessity for a comprehensive cost system cannot be overestimated. The materials saved in the course of the year will more than pay for the cost of running the system, while the friendly rivalry excited among the foremen of the different gangs is an incentive toward better work and more of it. Several such cost systems are in active operation and the results obtained are gratifying.

In connection with costs and with the payment of contracts, comes up the invariable question of how and where to get the money. Maintenance of pavements is surely a tax budget item and as such should be included in the estimate for the budget made up by the department. How to estimate the amount of money needed for repairs in the coming year is somewhat of a question, and the ideal method has by no means been reached. It is always possible, however, to set up for the different kinds of pavements the unit costs of maintenance per square yard of actual pavement laid, and it is also possible to find out the total square yards of pavement which have been under maintenance for the year. In order to make a comprehensive statement of the moneys needed for the coming year it is necessary to know two things: first the yardage which will come out of guarantee during the next year, and second, how much old yardage will be substituted by new pavements. Usually the termination of the guarantees are distributed throughout the year with the exception of December, January and February, and, if so, it will not be far wrong to divide the total coming out of guarantee by two in order to arrive at an average maintenance area on expiring guarantees, calculated on a whole year's maintenance basis. The same question of average applies with regard to the area which is to be newly repaved, if the repaving contracts are distributed equally throughout the year. It is then possible to estimate the amount of money required for the following year based on the average or unit cost per square yard for the previous year, applied to the yardage of that year, increased by the first of the two items mentioned and diminished by the second one. If the unit cost be high, the estimated amount for the following year will be correspondingly high. If the condition of the pavements at the end of the year be poor and it is intended that in the following year the conditions shall be brought up to standard, then either more money or greater efficiency of work is necessary, or perhaps both.

The study of the relationship between the repairing and the repaving of worn streets is, when considered scientifically, a decidedly new field. There are so many factors affecting the decision, that attempts to arrive at a scientific formula for such determination have not been wholly successful. It has always been the custom for the highway administrator to guess indifferently, or yield to pressure of one kind or another whenever it was deemed necessary to repave

any street. To obtain any basis for the application of a general rule to a particular street it is essential that the actual or estimated cost of maintenance be the cost necessary to put the street in the condition standard for that city. To set up an arbitrary rate for maintenance cost, per square yard of existing pavement, which must not be exceeded in a single year; or to limit the expenditure for maintenance each year to a definite percentage of the original cost of the pavement; or to delay repaving until the total of the average yearly maintenance added to a yearly sinking fund charge toward a depreciation fund, is at a minimum: all are methods depending for successful operation on a continuity of policy and standard pavement conditions. Until such perfection is reached, however, the ultimate basis for decision must be the judgment of the administrator.

The installation of a procedure in highways departments which will develop efficiency in the administration is a problem which involves to a considerable extent the local conditions. But the general outline and underlying principles are the same throughout the country: controlled inspection; standard specifications and contracts; proper use of assessment, tax levy, and bond funds; traffic records and their interpretation; comprehensive reports with intelligent summaries; efficiency and cost records; and, finally, the selection of an administrator technically trained, not as an engineer alone, but, rather, as an efficiency engineer.

Technically speaking, highway engineering is not complex but add to the engineering difficulties the great amount of detail involved, and the difficulties in the way of definite organization and control are quite apparent. They are not so great, however, but that any municipality by making the necessary changes in organization, both as to procedure and personnel, could obtain definite results in a period short enough to be well within the term of one administration. By taking advantage of the results obtained in other cities this can be accomplished. Highway efficiency is anything but the intangible fantasy of a theorist. It is a real live principle with a history filled with many failures, but also with many successes, all of which have taught their lesson in developing efficient administration.

STANDARDIZATION OF SPECIFICATIONS FOR PUBLIC WORKS

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Within the last few years a great deal of study has been devoted to the standardization of specifications. While considerable advance has been made in some particulars, the subject is so broad that specifications in general have not been standardized thus far, and, from the present outlook, the standardization of specification is still in its infancy. The technical journals and periodicals are devoting considerable space, both in the news and editorial columns, to this all-important question, and if we are to judge from the apparently logical arguments for and against the various clauses in specifications, it will be some time before we will approach standard forms of specifications for the various classes of work. Before a specification is so drawn that it can be considered even to approach what might be termed a standard specification, it is not only important, but necessary, that each clause be thoroughly discussed by engineers, contractors and material manufacturers from different parts of the country in order that points of view based on practical experience in different sections of the country may be given due consideration, as local and climatic conditions are important factors in specifications for public works. A specification for a particular class of work that might be ideal in one section of the country would, in all probability, not fulfil the requirements in other sections of the country for the same class of work. It is only by a thorough and comprehensive study of existing conditions, based on the practical experience of experts trained in the various classes of public works carried on in different sections throughout the country, that any definite principles can be determined upon to govern the drawing of standard specifications. A standard specification should be based on certain definite principles, subject to minor modifications dependent upon local and climatic conditions. The standardization of specifications is therefore dependent upon a determination of these principles. This can best be accomplished through an exchange of views of not only the engi-

neers, but the representatives of the other side of the question, namely, the contractors and material manufacturers. In other words, all sides of the question and points of view should be thoroughly discussed before any definite conclusions relative to the underlying principles governing the various clauses in the specification are determined upon.

Generally speaking, the engineer is inclined to draw a specification that will safeguard him against any lack of knowledge or definite data relative to different items in the specification. To a certain degree this should be done, but it should not be so generally and universally in vogue as it is in the present day specifications for public works throughout the country. One of the great faults of many engineers is that they depend too much upon their own knowledge. The engineering field is too large and comprises too many specialties, which requires years of practical experience to master, for one man to pose as an expert in all or several branches of the profession. The medical profession is divided into specialties, and the general practitioner realizes the importance of calling in specialists, and never hesitates to do so when the occasion arises. Why not the engineer? Unfortunately, there is a tendency among many of the engineers controlling the drawing of specifications for public works to pose to their employers as "Jacks of all trades" in the profession. This attitude results in the loss of large sums of money to the public. Committees have been appointed in different sections of the country to standardize specifications, but their work has simply been of a general character, and their findings, in some instances, have not even covered local conditions, simply because expert advice was not called in. If a doctor failed to call in expert advice when occasion required, it would often result in loss of life; fortunately for the engineer it usually results in nothing more than a loss of public moneys, a subject to which very serious consideration has not been given until the last few years. There are competent specialists in every branch of the profession, and there is seldom, if ever, any excuse for lack of definite knowledge relative to standard public works, such, for instance, as the "Accepted Types of Pavements," yet by looking over the specifications in use throughout the country it will be observed that there is no standard specification.

In this particular branch of public works, however, a step in the right direction has been taken. An organization is in existence whose

membership is open to cities throughout the United States, with an associate membership open to contractors and material manufacturers. Engineers delegated by the respective cities meet once a year, and the committees on the different types of pavements present specifications which are open to discussion by the material men, the contractors and the convention-at-large. Considerable has been accomplished by this and other organizations of the kind toward the standardization of paving specifications.

Each branch of work coming under the head of Public Works covers such a large field that it is quite evident that little progress will be made toward standardizing specifications for the respective branches of work until some definite plan is formed with this object in view. General discussions have been carried on for some time, and while such discussions are of great value in so far as they represent different points of view and bring out many interesting facts, they will never result in standardizing specifications. It is time that some definite plan be formed; discussions are endless, and when carried on too long usually result in confusion. Many engineers say they do not believe in, nor see the necessity for, standard specifications for public works. It has often been said that such a thing is not practical. This is largely due to a misconception of what the standardization of specifications really means—it is only the determination of certain definite underlying principles that can be readily adapted to varying local and climatic conditions. There are, however, certain classes of work that are not affected by local and climatic conditions and that have long since passed out of the experimental stage, the specifications for which differ widely in different sections of the country. This is largely due to the fact that no concerted effort has been made to compare the specifications with a view to determining upon a standard specification embodying the most economic and scientific method of construction and selection of available materials. One of the most important questions before the engineers to-day is the standardization of specifications, and any step in this direction is a step toward efficiency and economy in public works. Engineers to-day are well equipped to formulate standard specifications. They have a more thorough knowledge of business and costs than they had a few years ago. If specialists in the different branches of the profession representing different sections of the country were assigned to standardize a speci-

fication for the particular class of work with which they are especially familiar, and discussions and suggestions were solicited from engineers, material men and contractors, an advance would be made which would ultimately result in the determination of well-defined principles governing specifications for the respective classes of public works. Contracting is every day getting more and more on a business basis. The old type of contractor is gradually disappearing, and is being supplanted by business men, engineers, and men qualified to bid under the more thorough and complete present-day specifications and the strict interpretation of the same, which has made competition keener, and consequently weeded out many of the undesirable contractors. This illustrates the importance of determining upon underlying principles that may be readily adapted to local and climatic conditions, and of drawing specifications that are designed not only to insure good work, but to secure justice and equity to both engineer and contractor. At the present day there is a great diversity of opinion among engineers as to the proper method of executing specific classes of work and where all the methods may be designed to insure good work and bring about the desired results, the costs will necessarily vary, dependent upon the requirements of the specifications or the lack of specific information contained therein. There is more than one way of climbing over a fence, but there is more time consumed and energy expended by some in accomplishing this feat than is necessary, so it might be said that there is a standard procedure that should be followed. The same is also true of the various requirements and methods pursued in the performance of certain classes of work; hence the importance of determining upon a standard method of underlying principles to govern the performance of specific classes of work embodied in the specifications. Needless to say, this will result in a more thorough understanding between the contractor and the engineer, and, consequently, lower costs and increased efficiency. Every step toward standardization of materials and workmanship reduces costs, and places public works on a more thorough business basis. A concentrated effort toward the standardization of specifications would result in a more comprehensive study of materials in use, the quality required, and the work to be performed, than has heretofore been conducted. Different engineering societies and organizations are formulating specifications for public works, but little progress will be made until the depart-

ments of public works throughout the country make it their business to co-operate with one another and with the engineering societies for this specific purpose.

The importance of standardizing specifications for public works would be self-evident if a comparison of the unit costs of specific classes of work performed under similar conditions were to be made. Unit cost records and the standardization of specifications go hand in hand, as a scientific and systematic investigation of the unit cost of work performed, methods of construction, workmanship, and materials used, must necessarily be made before any conclusions can be arrived at with a view to standardizing a specification for the particular class of work under investigation. Therefore such records should be installed in all public works departments. As a simple illustration of the desirability, both from an engineering and economic point of view, of establishing certain standards in specifications, let us take, for example, the following clauses in the specifications of different departments of public works for new granite curb set in concrete:

1. The curb shall be twenty (20) inches in depth, and from three (3) to eight (8) feet in length and of a matched width of five (5) inches on top, and at no point shall be less than four (4) inches in thickness. The bottom length shall not be more than six (6) inches shorter than the top length.

2. The curb shall be sixteen (16) inches in depth and not less than three and one-half ($3\frac{1}{2}$) feet in length, averaging on each block not less than four and one-half ($4\frac{1}{2}$) feet in length, and be five (5) inches in thickness, except as noted for bottom of curb.

3. The curb shall not be less than five (5) inches thick and twelve (12) inches in depth; the lengths may vary between three (3) and six (6) feet.

4. The curb shall not be less than sixteen (16) inches in depth, and not less than six (6) inches thick and four (4) feet long.

5. The curb shall not be less than twenty (20) inches in depth, and not less than six (6) inches thick and four (4) feet long.

6. The curb shall be nineteen (19) inches in depth, and not less than three and one-half ($3\frac{1}{2}$) feet in length, averaging on each block not less than four and one-half ($4\frac{1}{2}$) feet in length, and be five (5) inches in thickness, except as noted for bottom of curb.

7. The curb shall not be less than three (3) feet or over twelve (12) feet in length, eighteen (18) inches in depth and of a matched width of six (6) inches on top.

8. The curb shall be cut in lengths of not less than six (6) feet, with a width of seven (7) inches on top and a depth of twenty (20) inches.

9. The curb shall be six (6) inches in width on the top and twenty-two (22) inches in depth, and not less than eight (8) inches in width at the base and shall not be less than six (6) feet in length.

These are examples of the lack of co-operation between public works departments, which has resulted in more or less waste of public moneys in the municipalities where a curb of satisfactory and economic dimensions has not been used.

From these examples it is evident that it would not be very difficult to determine upon a satisfactory standard for granite curb to be used under normal conditions and set in concrete. It is rather singular that the curb with the shallowest depth, twelve (12) inches, is used in a locality having a lower temperature in winter than any of the other localities in question. It is not the intention to convey the impression that twelve (12) inches is a proper depth for a standard curb, but there is certainly no justification for a variation in depth of from twelve (12) inches to twenty-two (22) inches for granite curb to be set in concrete and used under similar conditions. It is just as important that the curb should not be too shallow as it is that it should not be too deep. If too shallow, it will not fulfil the requirements, and consequently will have to be replaced too soon to justify its use. If too deep, there will be an additional cost for the excessive depth of material. It will also be noticed that no two specifications are alike with respect to the dimensions called for.

It is evident from the above that standard specifications for staple products would be of great value to the engineer, the consumer, and the country at large, as well as to the manufacturer. If we stop to consider that a variation in depth of 2 inches in a granite curb means a difference in cost of approximately \$1,250 per mile for the extra depth of curb and concrete, which would amount to about \$625,000, without renewals, in a city having 500 miles of paved streets, it impresses one with the fact that enormous sums of money have been wasted and are being wasted to-day in public works throughout the country, which could have been, and can be, avoided through standard specifications.

Let us consider, for example, the difference in cost (about 60 cents) per lineal foot between a 16- and a 22-inch curb with a top 6 inches in width. Add to this the additional cost for concrete 6 inches thick, 6 inches in depth and 12 inches long on the back and face of the curb, which would amount to about 10 cents, and the total additional cost of a 22- over a 16-inch curb amounts to 70 cents per lineal foot, or \$6,552 per mile, or \$3,276,000 for 500

miles. These figures, of course, pertain entirely to original construction. Renewals would still further increase the additional cost of 22-inch curb over 16-inch curb in a given period of years. Now it is quite evident that, if a curb 16 inches deep will fulfil the requirements under ordinary conditions, the use of a 22-inch curb under such conditions is not justified. Nor is the use of an 18-inch granite curb justified. Where a 16-inch curb will answer the purpose, the difference in cost, as stated before, for the increased depth of 2 inches is approximately \$1,250 per mile. A mere difference of opinion does not justify this additional expenditure.

This illustration is a small matter compared with the enormous sums of money that could be saved, and with the benefit that could be derived through the standardization of specifications for materials and workmanship for public works. If, for example, the public works departments throughout the country would agree to carry the idea of standardization into the formulation, a basis of acceptance or rejection of deliveries under standard specifications of staple products, where the quality, weight and dimensions have been standardized, the carrying out of this policy would mean the gradual development of a uniform policy of accepting or rejecting all deliveries under such specification in place of the present method under which very often deliveries rejected by one department are accepted by another to the confusion of the trade. This naturally results in the public works departments paying exorbitant prices for such products, as the manufacturer must increase his price a proportionate amount to guard against the degree of uncertainty relative to the acceptance or rejection of his goods.

Standard specifications, resulting from scientific investigation and practical experience of technical experts, would be both equitable and safe, and it is quite evident that the standardization of materials would cheapen the products and act as the dominating regulator to the industries affected. The standardization of screw threads, steel rail sections, and of structural steel shapes are notable examples of this. It is also interesting to note that the agencies instrumental in establishing these standards were the United States Government, an engineering society, and a rolling mill association. This goes to show the importance of the co-operation of radically different agencies representing all phases of the situation in work of this character.

Of course there is danger of a fixed standard becoming unprogressive and falling behind the demands of the time, but, on the other hand, any changes made or suggestions relative to changes in the fixed standards would be apt to be the result of scientific investigations and practical demonstrations. There is very little doubt that the establishment of fixed standards would stimulate and encourage practical experiments based on scientific principles with a view to improving upon questionable standards. This would be a marked improvement over the arbitrary rulings and diversity of opinion of individuals, exemplified in some of the present-day specifications. The dissemination of the information obtained through such experiments would enable all departments of public works interested to know fully and accurately the results in efficiency and economy of the general practices prevailing and experiments made by every other department. This would prevent the repetition of experiments that exists at present; the repetition by one department of the mistakes made in another; and would place all information of value obtained in one department at the disposal of all the others, and thus do away with each department working independently in comparative ignorance of what is being done in other departments.

Continuous and progressive change is unavoidable in specifications for materials owing to the development of the manufacturing arts and the advancement of science. A specification must necessarily follow these developments if it is to maintain its value.

The evils that might follow from an unintelligent application of a standard specification must not be overlooked. But under our present organizations controlling public works, such evils would undoubtedly be far less than those that frequently follow from a lack of any established standards.

There cannot be any doubt about the urgent need of standard specifications for materials. It is evident that, to obtain the best results, the trade output should be standardized, as was done in the manufacture of steel rails, Portland cement, etc. Take, for example, the variation in size of quarry products, of which granite curb referred to above is a notable example, and consider the difference in the cost of shipment dependent upon the size, and the increased cost of labor at the quarry, due to the various sizes called for. The benefits to be derived through the standardization of such products would justify any expense that might be incurred through investigation

with this object in view. If we consider the broad field as to materials and workmanship, covered by specifications for public works, it is quite apparent that the benefits to be derived through the standardization of specifications in general are unquestionably of sufficient importance to justify a concerted effort on the part of the departments of public works throughout the country. The departments of public works have been suggested as a medium through which this can best be accomplished, because they can make it their business to delegate engineers to meet at an appointed time and place, probably once a year, for this specific purpose. The results of an analysis of the many methods of workmanship and dimensions of materials called for in specifications for a particular class of work carried on under similar conditions would be surprising, and would emphasize the importance of determining upon standard specifications for public works from a purely economic point of view. The economic value of adapting modern scientific business principles to any business enterprise is no longer doubted. As all classes of public works are purely a business enterprise conducted under the direction of the people for their benefit, it would seem that we have been somewhat careless in attending to our business affairs. We should co-operate with the public officials and engineers, giving them sufficient latitude to employ the necessary experts, and urge the departments of public works throughout the country to take up this question in a businesslike manner, and to leave no stone unturned until the desired result has been attained. Too much emphasis cannot be laid upon the fact that, in order to keep pace with the constantly changing trade conditions and advancement of science, from time to time, all established standards must be subject to modifications. Therefore, standardization must be a continuing principle. Any association or organization established for this purpose should be permanent and should be the medium through which all necessary modifications in public works specifications are made.

The American Society for Testing Materials and the American Society of Municipal Improvements have made some progress toward the standardization of specifications. But all the work done through these societies has been purely voluntary on the part of the engineers, and, consequently, lack of time through press of business seriously interferes with the work. The importance of the situation, however, will be observed from the following extract of the report of the Com-

mittee for Standard Sewer Specifications appointed by the American Society of Municipal Improvements:

Several meetings of your committee have been held and substantial progress has been made, but its work has not yet advanced to the point where any portion of it can be submitted to the society for adoption.

Your committee realizes that sewer specifications, in order to be worthy of general confidence and adoption as standard, and to insure as general unanimity of opinion as possible as to their various provisions, must cover a wide range of conditions and must be in general harmony with the conclusions of committees of other technical societies and associations which are working upon similar problems.

No standard specification for sewer construction which has been generally recognized or adopted as such, has, up to the present time, been produced, and the specifications in use by even the largest and most important municipalities vary widely in many of their most important provisions. Difference in local conditions would, no doubt, warrant special provisions in regard to some of the more important details, but there would seem to be little reason why, in the most important particulars, standard requirements may not be applicable.

Materials of construction of acceptable quality are usually available.

The functions to be performed by the finished structures are substantially the same, and if the structures are designed to be permanent, as economy and expediency would generally require, the standard of excellence in the materials and workmanship employed may well be uniform.

Specifications for sewers of extraordinary size and special design will generally require addenda supplementing the standard specifications to meet the requirements in each particular case, while for pipe and masonry sewers of ordinary size, standard forms should ordinarily suffice.

The work done by the committees of these societies is done at their own expense and in their own time, and consequently cannot be as thorough and cannot bring about the desired results as quickly as if the work were a part of the business of the public works departments. It is not only a part of the business of such departments, but a very important part of their business, if economy and efficiency in public works is desired. It is needless to say that all public works departments should, and are striving to, conduct their business along these lines. Then why not make the standardization of specifications a business proposition, by making it part of the engineers' work? The expense incurred would be infinitesimal compared with the benefits derived. The highest plane of economy and efficiency in public works can only be attained through the standardization of specifications. Methods of construction, workmanship, and materials are constantly undergoing changes. A permanent association for the

standardization of specifications would enable all the public works departments throughout the country to keep abreast of the times and avail themselves of the most modern and up-to-date specifications based upon scientific investigations of trained experts in the various branches of the engineering profession. Of course too much emphasis cannot be laid on the importance of an organization of this kind co-operating with all other organizations and technical societies engaged in similar work, as the scope of the work covers such a broad field that every effort should be made to make it as thorough as possible.

The whole country is alive to the importance of standard specifications and the benefits to be derived from the same. All that seems to be lacking is a well-conceived plan to bring about the desired results. Some plan along the lines of the one suggested would be feasible, and has a distinct advantage in controlling such a large proportion of the available talent, necessary funds and data. Another feature, and the dominating one, is that the undertaking would be a business proposition conducted along business lines, with a definite object in view, namely, the standardization of specifications for public works. Such a movement would undoubtedly receive the hearty co-operation of the American Society of Civil Engineers and other technical and engineering societies throughout the country. As it is essential to have some definite plan to start a work of such importance and magnitude, it is suggested that the public works departments co-operate with the American Society of Civil Engineers, with a view to devising ways and means best adapted to the carrying out of a plan along the lines of the one proposed, and thus bring about the desired results as speedily as circumstances will permit.

EFFICIENCY IN BUDGET MAKING

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A budget, to be complete, should not only show the purposes for which appropriations are made but also the sources of revenue to be raised for meeting such appropriations. In this article, however, the revenue side of budget making is not discussed.

In a recent message to Congress, President Taft called attention to the fact that, of all the principal nations of the world, the United States is the only one not on a budget basis. The budget of a government is the principal instrument of financial and administrative control over its expenditures. Without any such means of control it is not surprising that Senator Aldrich should have stated that, in his belief, the annual cost of our federal government could be reduced \$300,000,000 by applying efficient methods.

As is the case with the federal government, practically all of our states also operate without budgets, and as a logical result the extravagance and waste of public funds by state governments has long been a subject of popular criticism.

Most American cities have, for many years, conducted their financial housekeeping on a budget basis. The methods employed, however, have been loose and inefficient. Instead of being used as a means for apportioning their funds according to the various needs of the community and insuring their actual application thereto by affording a basis for scientific accounting and auditing, the budgets of many American cities have too often been the means of hiding corruption. The making and passing of the budget has frequently been a carnival of log rolling, each alderman or commissioner inserting items for the special benefit of himself or his constituents and refusing to vote for the items inserted by his fellow-legislators unless they voted for those in which he was interested.

The making of a scientific municipal budget was first undertaken in 1906 by the City of New York. The task was approached by way of the health department, that branch of the city's service so closely related to its well-being. The functionalized and segregated budget plan worked out for that department was so successful as an object

lesson that the plan was soon extended to all departments of the city. Similarly New York City was the first to institute real public hearings on a tentative budget. In January, 1910, the Chicago city government adopted a functionalized segregated budget built on the New York plan with the further improvement of standard account titles. Milwaukee was the next to fall into line and Philadelphia has expressed the intention of adopting the idea. Officials of other cities throughout the country are now rapidly becoming interested in how to improve budget methods in their own communities.

The diversion of funds to purposes other than those for which they were originally appropriated has heretofore been rendered comparatively easy through lump sum or "mongrel" appropriations. Philadelphia's 1911 budget furnishes some striking examples of such appropriations:

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|---|----------|
| Postage, ice, files, incidentals, meals, repairs, advertising loans and entertainment of city and visiting officials..... | \$25,000 |
| Rent, postage, horse-keep and miscellaneous expenses in survey districts..... | 25,000 |
| Repairs, hauling and labor..... | 60,000 |

Another striking example is taken from Chicago's 1909 budget before the segregated plan was adopted:

For repairs and renewals of wagons and harness, replacement and keep of live stock, identification, police telegraph expenses, rents, repairs and renewals of equipment, hospital service, printing and stationery, secret service, light and heat and twenty-five more horses and equipment for mounted police and for repair of Hyde Park station; also other miscellaneous expenses, \$205,000.

There can be no justification for making such appropriations. They are so indefinite that adequate accounting or auditing control is impossible. Appropriations couched in such general terms might be expended for almost anything. Moreover, financial reports are often little more than transcripts of appropriation titles arranged in statement form. Reports in which expenditures are grouped in such phraseology can afford but little information to taxpayers as to actual costs. While it is true that auxiliary systems of cost accounting would greatly remedy such conditions, the development of costs should supplement rather than supplant the budget accounting.

Standard Form of Budget

Effective control over expenditures depends largely upon the care with which provisions are made to render ineffective the methods

which have been employed by administrators to circumvent the implied purposes of appropriations. Since an analysis of the requirements of the various departments of a city will develop many elements in common, methods of standardization have been devised which render possible the highest degree of control and stability in the method of preparing the budget.

Standardization of a city budget reduces to a definite fixed classification all of the things or objects of expenditure for which a city spends money. These are usually termed standard accounts. Once having determined the amounts required according to objects of expenditure the next step is to ascertain what public services are to be secured from the expenditure. These public services are known as "functions" and should be shown in a standard budget grouped under departments or other organization units. For example, a health department may perform several functions, such as milk inspection, sanitary inspection, child hygiene, etc.

By means of such an arrangement a clear and comprehensive picture of the various municipal functions and activities is obtained and a basis made available for judging understandingly the adequacy or inadequacy of appropriations. Not only are the appropriations for each function shown thereby but also what services or things must be provided in order that such functions may be performed.

After working out a segregation it should be adopted as a standard and not deviated from thereafter, because the comparisons thus afforded between functions, sub-functions and objects of expenditure become of more significance and value from year to year.

It should therefore be made mandatory, through charter provision or ordinance, for the appropriating body to prepare each year's estimates and also pass the budget according to the standard adopted. Besides making possible comparisons between like appropriations from year to year, simplifying and improving the accounting, auditing and reporting methods, the adoption by a city of a segregated and standardized budget makes very difficult the former custom of including "jokers" under the cloak of appropriations for various and indefinitely stated purposes.

A classification under which the objects of expenditure of the City of New York may be logically grouped and which is adaptable to almost any city is as follows:

1. Personal service.
 - (a) Salaries and wages.
 - (b) Fees.
 - (c) Commissions.
 - (d) Other.
2. Supplies and materials.
 - (a) Fuel.
 - (b) Forage.
 - (c) Provisions.
 - (d) Material.
 - (e) Other.
3. Purchase of equipment.
 - (a) Furniture and fittings.
 - (b) Motor vehicles.
 - (c) Vehicles other than motor vehicles.
 - (d) Live stock.
 - (e) Other.
4. Transportation service.
 - (a) Hire of horses and vehicles with and without drivers.
 - (b) Storage of vehicles.
 - (c) Shoeing and boarding horses including veterinary service.
 - (d) Other.
5. Special contractual service.
 - (a) Repairs and replacements.
 - (b) Inspection.
 - (c) Other.
6. Communication service.
 - (a) Telephone.
 - (b) Postage, telegraph and messenger.
7. Miscellaneous expenses.
8. Fixed charges and contributions.
 - (a) Debt service.
 1. Interest.
 2. Redemption.
 3. Sinking fund instalments
 - (b) Rent.
 - (c) Pensions.
 - (d) Insurance.
 - (e) Care of dependents.
 - (f) State taxes.
 - (g) Other.
9. Capital outlays.
 - (a) Purchase of real estate.
 - (b) Construction and betterments

It is desirable that a minimum of discretion be exercised by administrative officials in determining under what classification a given expenditure should be charged, because experience shows that several different officials will sometimes charge an item to several different accounts—each official giving a good reason for his decision. Definite schedules showing the items chargeable to each account title should therefore be prepared, printed and distributed throughout the departments to all employees who prepare purchase requisitions, audit vouchers or keep accounts. The schedules should contain in detail a list of every kind and class of service or thing for which the city spends money, arranged both alphabetically and according to accounts chargeable.

These schedules when prepared should be codified so that each kind and class of service or thing can be readily expressed through the

use of symbols. This may be done, as in Chicago, by using numerals to designate departments and functions; letters to designate the standard accounts, and numerals again for the items chargeable to the several accounts. Another method is the Dewey decimal system of library classification. As an illustration of the Chicago scheme, 24 E 156 might denote absorbent cotton for the bureau of child hygiene in the health department—the numbers 20 to 25 inclusive denoting health department and 24 the bureau of child hygiene, "E" denoting the standard account "supplies" and 156 denoting absorbent cotton. The Dewey system is advocated by the President's Commission on Economy and Efficiency, and is being successfully operated in several departments of the United States government. The simplicity and elasticity of this system as applied to a schedule of supplies is indicated in the following illustration:

| | |
|--------|--|
| A | Supplies. |
| A 1000 | Provisions. |
| A 2000 | Forage and other supplies for animals. |
| A 3000 | Wearing apparel. |
| A 4000 | Fuel. |

Extending this method further, "provisions" would be subdivided into further classifications, for example:

| | |
|-------------|--------------------------|
| A 1100-1199 | Meat, fish and fowl. |
| | Beef: |
| A 1110 | On the hoof. |
| A 1111 | Dressed in carcass. |
| | Veal: |
| A 1120 | On the hoof. |
| A 1121 | Dressed in carcass. |
| A 1200-1299 | Dairy products and eggs. |
| | Milk, fresh: |
| A 1210 | Cow's milk. |
| A 1211 | Cow's milk modified. |
| | Preserved milk: |
| A 1220 | Condensed milk. |
| A 1221 | Evaporated milk. |

and so on *ad infinitum* for each classification regardless of the number of classes or the detail involved. Extended so as to include departments or other organization units and the functions performed by

each unit, the code designation D H 11 A 1000 would represent (D H) department of health (11) hospital service—care of patients (A 1000) supplies—provisions. The adoption of a definite code system will not only furnish an excellent basis for requisition and audit, but will simplify the compilation of statistics for use in preparing budget estimates and in making public reports.

The compilation of statistics by use of code symbols is best accomplished by mechanically punching the code symbols in cards and then sorting and tabulating the cards with electric sorting and tabulating machines. Information can now be acquired in this manner which a few years ago was only obtainable through laborious clerical effort.

Salaries and wages of officials and employees represent a very large part of the city's budget—often ranging from one-half to two-thirds of the total. Much political intrigue and jobbery is frequently carried on through failure of the appropriating body to provide for adequate control over appropriations of this character.

To circumvent and minimize, as far as possible, the misuse of salary and wage appropriations, it is essential that they be classified in four general groups, namely:

1. Salaries, regular employees.
2. Wages, regular employees.
3. Salaries, temporary employees.
4. Wages, temporary employees.

Groups 1 and 2 represent remuneration provided for employees engaged during the entire year (including or excluding Sundays and holidays, as the case may be) regardless of season, weather or the quantity or exigency of the work to be done. Groups 3 and 4 represent remuneration provided for employees who render temporary service dependent upon season, weather or the quantity or exigency of the work to be done.

Under groups 1 and 2 would be listed in detail the number of incumbents, rate and amount provided for each class and grade. To illustrate: under salaries, regular employees, might appear

| | |
|--|---------|
| 1 director..... | \$5,000 |
| 1 chief clerk..... | 2,500 |
| 2 clerks @ \$1,800..... | 3,600 |
| 2 bookkeepers @ \$1,800..... | 3,600 |
| 2 stenographers and typewriters @ \$1,200..... | 2,400 |

and under wages, regular employees,

| | | |
|----------------------------------|-----------------------------|------------|
| 1 foreman of mechanics | @ \$5.00 per day (365 days) | \$1,825.00 |
| 2 carpenters | @ 5.00 " " (313 ") | 3,130.00 |
| 3 plumbers | @ 5.00 " " (313 ") | 4,695.00 |
| 1 mechanical engineer | @ 4.50 " " (365 ") | 1,642.50 |

Similarly, under groups 3 and 4, would be listed each class and grade and rate of compensation. Instead, however, of showing the number of incumbents in each class, the schedule would show the time of service based upon the estimated "man" days, weeks or months required for each class and grade of service. To illustrate: under salaries, temporary employees, might be listed:

| | | |
|-------------------------|---------------------------------|------------|
| Accountants | @ \$2,100 per annum (36 months) | \$6,300.00 |
| Stenographers | @ 1,000 " " (18 ") | 1,500.00 |

and under wages, temporary employees might be listed:

| | | |
|--------------------|-----------------------------|----------|
| Foremen | @ \$5.00 per day (60 days) | \$300.00 |
| Calkers | @ 4.00 " " (60 ") | 240.00 |
| Laborers | @ 2.50 " " (1,150 ") | 2,875.00 |

Such grouping will permit the director or other department head to utilize his appropriations for temporary employees as the requirements of the work demand. He could, for example, if the above illustrations were actual appropriations, engage six accountants for six months, twelve for three months or twenty-four for one and one half months, or, in the case of wages, ten laborers for 115 days or one hundred laborers for eleven and one-half days. In fact, he would have entire discretion as to the number of incumbents and length of service for each temporary position so long as the total number of work units expressed in days, weeks or months were not exceeded.

In reply to objections that the administrator should not be tied down to the extent of losing entire discretion in the application of his appropriations, such allowances for temporary employees should be granted, thus providing the elasticity needed to conduct efficiently the work of his department.

Such elasticity as may be necessary in the standard accounts other than salaries and wages may be provided subsequently by *inter se* transfers, herein later discussed.

Segregation of appropriations within a department or other organization unit according to functions, sub-functions, and standard accounts is the only means of affording adequate publicity of the

financial provisions made for carrying on each function. It enables one to ascertain readily, for example, what means are made available for conducting a campaign for the reduction of infant mortality, for milk depots, for visiting nurses, for child hygiene; or to furnish a supply of water, subdivided as to administration, collection and storage, pumping, distribution, analyzing and testing, etc.

The plan of functionalization referred to may be extended so that departments or other organization units can be grouped according to the general functions they perform for the community as a whole. For example, the police and fire departments, building inspection, etc., may be grouped under "public safety." This idea has been advocated for a number of years by the Bureau of Census in Washington and a number of cities in the United States have adopted it in presenting financial reports. General government, public safety, health and sanitation, care of the dependent, delinquent, and defective are some of the broad functions each municipal corporation performs for its community. This kind of functionalized grouping of budgetary appropriations however, can be best shown in the form of a summary, attached to the budget.

Preparation of Budget Estimates

To facilitate the preparation of a standard form of budget, it is essential that estimates be prepared in accordance with the standard account titles and functions. Uniformity should be strictly adhered to. Standard forms should be designed for departments or other organization units to be used by them when submitting their estimates. Careful thought should be given to designing these forms. What character of information will best shed the light upon requests for appropriations and what is essential to provide the best basis for investigation, are the principal considerations to be borne in mind. The number of different forms should be as few as possible, so as to simplify the work of preparing the estimate. Estimates for salaries, regular employees, for example, should be submitted on columnar ruled forms arranged to show: (1) title of position; (2) rate; (3) estimate; (subdivided as to (a) number of incumbents, (b) total amount, (c) salary increases, (d) new force); (4) comparison of estimates with latest pay-roll condition. Estimates for salaries, temporary employees, should show the title of position and rate, the number of days, weeks or months estimated to be required and the

amount necessary to pay therefor, also comparative data for the previous year.

The principle of requiring officials to show, not only the details of what is wanted, but also supporting comparative data whenever possible, admits of intelligent analysis and renders more simple the task of the appropriating body. Another valuable feature of this principle is the tendency it has to obviate careless and hastily considered estimates. It is hardly possible to prepare a logically supported estimate unless an intelligent analysis has been made of the expenses of previous periods. Estimates for supplies and materials should show in detail each kind, class, quantity and probable cost. If stores accounts have been kept, the consumption, both as to quantity and amount, during the previous year and the nearest six months period should be shown. Inventories at the beginning and end of the previous year, together with the latest one available, should also be set forth. If stores accounts have not been kept, expenditures, for the previous year and the nearest six months period, together with inventories, if available, furnish the next best information with which to support estimates.

Expenditures of the previous year are oftentimes useless as an aid in determining in advance the needs for the succeeding year. For example, purchases of supplies or materials in large quantities may be included in the expenditures for a given period, although actually consumed in subsequent periods. It is apparent, therefore, that expense accounting and stores accounting are of primary importance in efficient budget making. Through such mediums only is it possible to obtain an accurate idea of the cost of conducting each function or activity. What was obtained and what was expended in obtaining it is information necessary in determining the desirability of expansion or contraction through larger or smaller appropriations.

Departments should be given ample time in which to prepare their estimates. Printed forms should be in their hands several months in advance of the time set for passing the budget. Ample time should also be allowed for investigation of the estimates and the preparation of a tentative budget for public discussion before the appropriating body. Budgets should not be made in secret. The widest publicity is desirable, and intelligent expressions of approval or disapproval of every item should be encouraged. Estimates should

be printed for distribution. In large cities separate pamphlets should be printed for each of the large departments, because individual criticism is usually concentrated on one particular department or function.

Passing the Budget

The departmental estimates having been made available in printed form, it is always desirable that the fullest publicity be given thereto. Responsible civic organizations should be encouraged to examine into the need for the amounts requested. While it is true a department head should know more about the needs of his department than anyone else, local political conditions are often such that the time of such executives is mostly consumed with matters other than the actual conditions within their respective departments. They must rely on reports of subordinates, and these latter sometimes lack sound judgment as to the needs of even their particular divisions. They often fail to sense the comparative importance of the several functions or divisions of the department. Even when a department head is himself thoroughly informed as to the conditions within his organization he too sometimes lacks the proper perspective as to how the amounts should be apportioned between the several functions of his department. It is of much importance, therefore, that either the comptroller or the appropriating body should directly or indirectly conduct a detailed investigation to determine the adequacy or inadequacy of departmental requests. Such investigations should, of course, include careful consideration of results accomplished the previous year with the funds allowed, unit costs, and the quantity and quality of service needed to be rendered the ensuing year. Civic organizations which from year to year continue to study the field of municipal service are often specially fitted and equipped to assist in such investigations.

The budget of a city when once adopted remains in force for an entire year. It directly affects in some way the daily life of each person residing therein. The spirit of the laws upon which our entire governmental structure is erected demands that, before appropriations are formally passed, citizens be given an opportunity to appear before the appropriating body and state any objections they may have. For this reason, as soon as the estimates have been examined by the officials charged with that duty, it is desirable that a tentative budget

be prepared and public hearings held thereon. To insure an adequate interest in such public hearings, the dates and hours thereof should be given publicity in the local press at least two weeks in advance and copies of the estimates or tentative budget generously distributed. If a large number of citizens desire to be heard, a rule may be adopted whereby spokesmen only shall be recognized.

As a means to help inform the public of the vast details of a city's business, New York, in 1910 and in 1911, held what were termed "budget exhibits." They were kept open for one month immediately preceding the passage of the budget in each year. Facts and figures graphically displayed, intermingled with physical objects, informed the visitor of the city's activities—what had been and what was expected to be done with taxpayers' money. Through this means concrete information respecting estimates was made available to everybody for effective use at public hearings.

It has too frequently been the custom for a budget to be made up in "star chamber" sittings by a select coterie of political officeholders controlling the city's purse strings and then passed by a council or other legislative body sitting in "executive session." That day is rapidly passing and the people are insisting that public business be conducted publicly.

The chief financial officer may be sincere and progressive in his efforts to better municipal conditions and feel that he, and perhaps a few close advisers, alone know what is best for the city. Therefore he may refuse to take the public into his confidence, lest his pet plans receive the wrong kind of publicity and his efforts be brought to naught. He may even refuse until the last possible minute to confide in the legislative body charged by law with passing judgment upon the budget. Such a stand on the part of any public officer is ill taken. It has been demonstrated again and again that the public, when properly informed, may be relied upon to take wise action.

Many cities do not pass their annual budget until after the beginning of the fiscal year to which it relates. The annual expenditures of a city necessarily begin on the first day of its fiscal year. Unless the appropriations have been passed, such expenditures are made without adequate legal authority. Dilatory methods tend to confuse both accounting and auditing. It is desirable that ample time be provided between the final passing of the budget and the beginning of the fiscal year, to permit the administrative officers to become

thoroughly familiar with the provisions thereof, and also to permit the opening of new appropriation accounts.

Fully as important as the segregation of appropriations into standard accounts is the phrasing of the text of appropriation bills. The accounts having been selected, grouped, and codified for administration along certain definite lines, the text should clearly set forth the instructions necessary to secure such administration. For example, a paragraph similar to the following, taken from the new Chicago Budget, should be inserted in the bill:

That the comptroller and the heads of the other departments, ~~boards and~~ offices of the city government shall administer the amounts appropriated in this bill by accounts as specified by code numbers, and they are hereby prohibited from incurring any liabilities against any account in excess of the amount herein authorized for such account and from changing any salary or wage item herein.

It is always impossible to foresee all contingencies which may arise several months hence and demand an adjustment between appropriation accounts. Transfers from one account to another are therefore necessary from time to time. By compelling department heads to ask for transfers, attention is at once directed to the fact that their contemplated expenditures exceed the amount allowed, and the question which naturally arises and must be answered is, why? For this reason there will develop a tendency to exercise more economy in expenditures and keep within the original allowance if possible. Unless restrictions are imposed, however, the transfer privilege is sure to be abused. It is, therefore, well to prescribe in the bill that no transfer shall be made from a "salaries" account to any other than a "salaries" account. Similarly with respect to "salaries, temporary employees," "wages" and "wages, temporary employees," "supplies and materials," etc.

Instances have been known where a department head exhausted practically all of his appropriation for "wages" within the first few months of the year and then requested an additional appropriation or transfer.

Departments should be required to prepare their pay rolls in accordance with the items listed under appropriations for salaries or wages, regular employees, and be restricted to a monthly or weekly pro rata expenditure of the total appropriation for each item, according to the frequency of payment. By this means, all accruals resulting from the fact that positions provided for were not filled for

the entire year or on account of deductions for absences or other causes would revert automatically to the general fund of the city.

This kind of control has been in successful operation in the City of New York since 1909, and has been the means of large savings. The amount reverting to the general fund from salary and wage appropriations for 1908, prior to the adoption of the pro rata expenditure principal, was only \$300,000. For 1909 it was \$1,060,000 and in 1910 it amounted to \$1,941,000. Such a practical working out of a principle proves conclusively the need of such control. Moreover, efficiency is not curtailed. Indeed, it is increased. Not only are large savings effected, but the realization that accruals in salary and wage appropriations cannot be expended precludes any attempt, that otherwise might have been made through political or other improper influences, to utilize the money in giving away jobs or in granting unjustified increases.

If standard specifications have been adopted for the purchase of supplies and materials, a clause should be inserted that expenditures from such accounts shall be made only on the specifications adopted.

Administering the Budget

The most efficient plan of budget making may be of no avail unless the budget, after it is passed, be efficiently administered. The restrictive provisions of the budget are there to be enforced. Claims against appropriations should be allowed only when they constitute proper charges against such appropriations.

Amounts set forth in the budget should not be permitted to become over-encumbered with liabilities. The pro rata restriction as to salaries and wages should be enforced. If, through an error when originally estimating the requirements, or, through an emergency arising which could not have been foreseen sufficiently in advance, the original appropriation for a specific purpose subsequently proves to be inadequate, a request to the appropriating body for transfer of funds from other like appropriations will provide the remedy.

Transfers of unencumbered balances should not be allowed, however, until the need therefor has been sufficiently investigated and the request published in the printed proceedings of the appropriating body at least a week before it is granted.

EFFICIENCY VALUE OF THE BUDGET EXHIBIT

BY J. HAROLD BRADDOCK,
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With the growth of cities and the increasing complexity of their activities there had been little concurrent development of means for popular control. Taxpayers accordingly had known progressively less concerning local administration. Inertia had continued antiquated methods, and in the resultant obscurity politicians had found their opportunity to plunder.

Then, as one of the many experiments to alleviate conditions, came the budget exhibit, planned to meet the inquiries and criticisms of taxpayers now restless with the rise in the cost of city government. By showing the citizen just what he is getting for his money, the exhibit was intended primarily to check official extravagance. It has done more. It has driven home the fundamental that the public business is the public's concern, and that every individual has a share in the collective burden of all. Furthermore, it has emphasized personal duty and personal opportunity as one. City officials are now realizing the necessity for applying to municipal activities the principles of scientific management, and in the effort to gather the basic facts are now learning to know how their work ought to be performed and the best organization and methods for its accomplishment. And, on the theory that every department head must justify in the eyes of the public his demand for a share of the annual expenditure, appropriating bodies, too, have become more determined against increases unless officials set forth graphically the salient facts which all ought to know.

The Budget Exhibit and the Citizen

Burke Cochran, in one of his famous bursts of oratory, referred to the successful English grafter who, when faced with the evidence of his guilt, declared that he marveled at his moderation, so little attention had his accusers paid to his operations. An American city official seems to hold a similar view of public interest, for, notwithstanding disgraceful exposure within a year, he asked \$7,350 increase for administrative salaries. Other than the budget exhibit,

what evidence had the taxpayer that \$135,328 total increases could be justified by this department, of which an investigating body had said that the superintendent was useless, that there was no executive supervision of work, that inspectors were incompetent, that favored contractors were repeatedly benefited? Taxpayers must be pardoned for wanting to know what a department has done during a year to warrant increases representing a capital of \$5,325,000 and equivalent to taxes on property worth \$13,400,000. Citizens from a residence district should be left to their own thoughts when told at a budget exhibit that to pay for seventy-nine new employees and increase the salaries of 268 others would require five miles of new \$10,000 homes.

Through the budget exhibit, citizens are becoming alive to the cost of municipal waste. They protest against adding great sums to city salaries, on the ground that many a family has to deprive itself of some of the comforts and almost of the necessities of life in order to pay the annual tax bill. While considering that there is much inequality in pay among city officials, they insist that such readjustment as is necessary can as well be made by cutting down the top-heavy salaries as by increasing appropriations. With the extension of the budget exhibit, equalizing downward is progressing.

The Budget Exhibit and the City Official

Time was when city officials brazenly asked "What's wrong with my expenditures?" And the citizen uninformed was the citizen cowed—which usually eventuated in the citizen disinterested. Where the budget exhibit has come into its own the situation is reversed. When one city official requests for the following year \$2,450 less than he expended during the previous year, and another asks for \$63,930 less, the taxpayer demands to know why a third department head wants an increase of 235%. And unless the official has conclusive reasons, the increase is denied. It is growing more difficult for political favorites to get padded budgets. Competitive bids are being substituted for graft in open market orders. Engineers attest their awakening by five times as much pavement laid in two months as in the preceding four years. A city official cuts salaries in his department from \$36,000 a month to \$12,000, knowing that budget exhibit publicity is worth more than old-time political tactics.

With the budget exhibit the city official wishes to or is forced to explain. He has to explain, clearly and pointedly. If he mumbles his statements, he has to amend. If he omits, he is discredited. It is now for the official and not for the citizen to describe salaries and wages so that padding could be discovered. One department head requests appropriation to repair paving on a basis of 300 to 365 days per laborer per annum; another calculates 200 to 300 days each. This is made clear by the budget exhibit. Social workers, trade unionists and societies for preventing cruelty arise to know by what laws, human, divine or political, the official could compel engineers, foremen and laborers to work 365 days a year. The taxpayer, too, wants to know just how it would be done. Even schoolboys ask why two wheelwrights require the constant supervision of two foremen wheelwrights and what is the matter with laborers when thirty supervising employees are required to keep thirty-eight laborers at work.

The Budget Exhibit and the Appropriating Body

By a curious mental astigmatism that affects taxpayer and official alike, it is easier to get \$100,000 for a top-heavy street payroll than \$10,000 to open a branch library or a milk station. With a budget exhibit, education and health have better conditions of competition. Here the street commissioner is forced to show results comparable in terms of taxes and unit costs with the figures of the health officer and the school superintendent, and these in turn must prove activities more valuable per dollar of appropriation than other department heads. These questions stand out: Shall there be four additional nurses for tuberculosis clinics, or a new automobile? Two additional nurses for social service work, or a new departmental draftsman? Tuberculosis day camps costing \$5,160, or free taxicab transportation for clerical assistants? Clinic physicians costing \$8,100, or doubled salary for a city official? Shall there be more training schools, more recreation centers, vocational training, domestic science, kindergartens, or shall there be more superannuated messengers and increased salaries all around?

Property owners obviously wish all the money voted that is necessary for the protection of health and safety. They approve semi-annual inspection of tenements and the removal of dark rooms. But having seen at the budget exhibit the best showing possible for

each department, they appreciate that it is still feasible to give all the education that is justified, to do all the health work that is needed, to give hospital patients plenty of beds and plenty of food, to check crime, to pave streets—in short, to widen greatly the scope of municipal activity, without increased appropriations, because of the money saved by retrenchment. They realize that the best possible reason for reducing a padded payroll is that the money is needed to save babies' lives, to buy food for consumptive patients, to provide truancy officers. They see that in opposing inefficiency they lose ground unless at the same time they approve and support efficiency. Those who are watching a city debt pile up, those who know that in that debt are vast sums that ought to have been put into budgets, realize that the time has come for the citizen who would do good without doing harm to reason about the budgets in terms of "either-or" and not terms of "both-and." The more worthy the activity, the stronger the reason why its administrators should not waste a dollar and should take the public completely into their confidence; the more reason also why its advocates should help city officials and the overburdened taxpayer adopt methods that will disclose opportunities for retrenchment and then compel such retrenchment. Through the budget exhibit this stands out as the great problem of budget making—the problem of alternatives.

The Budget Exhibit and the Civic Worker

If, in the past, taxpaying bodies have seemed to emphasize the importance of economy, while charitable bodies have seemed, as a rule, to want to spend even more money, it is largely because the two groups were looking at different facts. Philanthropists are spending millions a year to relieve individuals in distress and to remove conditions that cause sickness and immorality. Naturally they insist that the city stop manufacturing the supply of distress and help change unfavorable conditions. Taxpayers, on the other hand, are closer to their own tax bills. The philanthropist is perfectly willing to agree that not one dollar more ought to be spent than is necessary to meet 100% of the city's obligation to 100% of its population. Nor would any taxpayer claim that sickness and ignorance and theft should go unchecked. So with the budget exhibit as a means, those who want less money spent in the aggregate can now get together with those who want more money spent to

obtain particular benefits approved by all, with the net result to the community of retrenchment where waste is proved and more generous appropriations where needs are proved that cannot be met by present allowances. Coincidentally there is unity of volunteer agencies and taxpayers' organizations to stop waste, to increase efficiency, and to meet the needs of health, education and protection, by gathering facts and bringing influences to bear in an impersonal, non-political way to secure through city government a maximum increase in benefits with a minimum increase in expenses.

Co-operation of this kind must result in a definite plan, and so there is the example of the local needs association which at budget-making time formulates a comprehensive program with many such propositions as these:

That the mayor provide for an adequate group of inspectors for the bureau of weights and measures.

That the police department assume active direction, by means of a squad, special detectives, or in some other way, of the increasing number of mendicants throughout the city.

That the proper department be permitted to establish farms for the treatment of the chronic inebriate and the chronic vagrant.

That the department of education make provision for opening in the late afternoons and evenings, from April until October, rest and play spaces for mothers and children in the public school courts of the crowded sections.

That seats be provided on the bridges for working people, mothers and children, and that the police department be urged to see that they are used by this group, rather than by loafers and the indolent.

That the board of health establish at an early date a tuberculosis clinic in the very needy Italian section.

That the department of charities consider seriously the great need of a convalescent home and sanitarium for adults.

That the proper authorities bring pressure to bear at Washington to devise means of giving citizenship papers to foreigners desiring them without delay and unnecessary cost. That other offices be provided besides the one used at present, and that the widest publicity be given to the

fact that proper persons can obtain such papers in a dignified and rapid manner.

That the board of aldermen take up the question of push cart regulation throughout the tenement section of the city. That arrangement be made to avoid selling without license, or graft in obtaining one, and that proper statistics regarding every push cart peddler be gathered in the bureau of licenses at the City Hall.

That the street cleaning department be urged to make use of the high pressure mains where possible for flushing the streets in the tenement section once a day during at least six months in the year.

That the tenement house and fire departments be so organized that inspectors shall visit the tenement houses at frequent intervals to insist that the fire escapes on yards and streets be kept clear.

That the number of inspectors, both of milk brought into the city by large and small dealers and of milk sold in groceries, delicatessen stores and lunch rooms, during the summer be increased so that adulteration, impurities, contagious diseases and germs contagious to babies be as far as possible eliminated.

That there be greater and more continued inspection of the moral character of the amusement boats plying on the river, bays and sound.

That more co-operation be carried on between the departments of the city and the gas and electric companies in the opening of streets.

Behind this program is a body of civic and social workers and hard-headed taxpayers, backed by such statistics and facts that the generally worded demand cannot possibly secure. Here again the budget exhibit brings out the superiority of fact, firmness and dignity over bluster, noise and hearsay.

The Budget Exhibit and the Public

As illustrated by the budget exhibit, municipal administration is developing along lines of competency, efficiency and scientific management. Money in gross is being economized, results are

being intensified. That the general public can understand savings only when they mean less money, is not the public's fault. And each year larger numbers are being brought by the budget exhibit to see that individual city employees are doing many times as much work, supplies are being made to go several times as far, municipal service is being extended and administrative efficiency developed.

Laying stress on the principle that one great object of all democratic government is to enlist the interest of every citizen—to get the taxpayer to see the significance of his government to his private life—the budget exhibit shows graphically how much money has been appropriated for a department, what has been done with it; what is planned for the future, how much is requested in the next budget; increase or decrease in amount; reasons therefor. The dollar question is put forward, but behind this is the attainment of efficiency. While the taxpayer is likely to ask only, "To what extent will it affect my rates?" the department head asks, "Where can I improve the organization and system to produce better aggregate results?" For all concerned there is a clearer conception of causes and effects, of costs and results. Consequently, city officials on record for promised results substitute system for disorder, employees with a goal replace disinterestedness with ambition, citizens awakened check up the effect. In other words, here is a complete exhibit of the working machinery of the city government, where any intelligent taxpayer may learn the use to which his tax money is put and acquire knowledge on which to reason more logically and forcibly against its misappropriation or waste.

ATTAINING EFFICIENCY IN CITY SCHOOL SYSTEMS

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Efficiency in education implies standards of efficiency and detailed knowledge of the results achieved.

Standards of Judging of the Efficiency of a City School System

The final test of whether a school system is doing its work well lies in whether it is giving to the community supporting it young men and women prepared to take their place and do their part in the life about them. Whether the young people now coming from our schools possess the health, the kind of knowledge, the degree of skill, and the qualities of character required in the immediate future, of strong men and women, can only be determined, if at all, after these young people have been out in the world from five to ten years, or even longer. To make the ultimate test of education the basis of judging the present efficiency of a school system is consequently out of the question. Hence the necessity of fixing upon and applying other criteria.

The idea that school work can or should be subject to efficiency tests is still foreign to most of the men and women engaged in education. Only here and there has the idea found acceptance and has the need of efficiency standards been felt. As a result but few such standards have been developed. Indeed, at the present time, we scarcely know what constitutes efficiency even in such formal studies as arithmetic, spelling and writing, to say nothing of having fixed upon definite standards by which to judge the efficiency of a city school system. Any standard proposed at the present time as measures of the efficiency of a city school system must therefore be very general in character.

We, however, believe it will be generally accepted that that school system is most efficient:

- (a) which reaches the largest proportion of the children of the community of school age;

- (b) which succeeds at the same time in giving to the largest proportion of the children of the community a complete elementary education, if not a complete high school education;
- (c) which gives at the same time to the children of the community the best quality of elementary and high school education;
- (d) which educates the children of the community, when everything is taken into account, at the smallest cost to the taxpayer.

Attaining Efficiency: Reaching the Children of the Community

Before a city school system can be judged with reference to the extent to which it is reaching the children of the community of school age, and before definite steps can be taken to increase efficiency in this direction, knowledge must be had of the number of children in the community who ought to be in school.

The compulsory attendance laws of most of the states require that all children between the ages of seven and fourteen be in attendance during the whole time the school is in session. To make sure that children have at least the opportunity to gain a complete elementary education, the laws of some of the states compel children under sixteen years of age, who have not graduated from the elementary school, to attend school for at least a given number of days each week. Most states do not stop, however, with making school attendance compulsory upon all to the fourteenth year and with compelling children who have not graduated from the elementary school to attend until sixteen, but of such worth is education deemed to be to the individual and of such importance to the state that it is made obligatory upon the community to afford to its children the opportunity of securing at public expense a high school education. In a word, it is generally accepted that the interests of the individual and the needs of a democratic society like ours demand that all children from six to fourteen years of age should be in regular attendance on the elementary school and that all children between fourteen and eighteen should be in high school.

There is, however, scarcely a city in the United States that has accurate knowledge of the number of children in the community between the ages of six and eighteen, and has this knowledge so

ordered that it may be made to serve as the basis of judging of the efficiency of the school. To be sure, the state laws require in many places a so-called annual school enumeration, but these enumerations are, as a rule, both inaccurate and incomplete, and, in most cases, it is impossible so to arrange the data collected as to show the number of children in the community of each of the several ages between six and eighteen, to the end that comparisons may be made between the number of children of a given age that ought to be in school and the number of such children that are in school. Further, the annual reports of most city school systems show the increase in enrollment year over year, and this increase is pointed to as evidence of increasing efficiency. But such data throw no light whatever upon efficiency. Indeed, in centers of rapidly increasing population, the schools may show an increased enrollment from year to year, and yet they may be reaching relatively fewer and fewer of the children of school age.

The first step in attaining efficiency in a city school system is, therefore, to secure an accurate school census which shows the children of each age between six and eighteen. A comparison of these data with the total enrollment by ages, in public, private, and parochial schools will reveal what proportion of the children of the community of each age are being reached by each kind of school; what proportion are not being reached by any school; and the proportion being reached by the public school.

Table I shows the school census, by ages, of the city of Cleveland for 1908-1909, the number enrolled in public, private and parochial schools, the number in no school, the per cent in no school, and the per cent of all the children of the city in the public school.

It will be noted that the sum of the children enrolled in 1908-1909 in the public schools of Cleveland and those claiming attendance in private and parochial schools is greater for the years six, eight, nine, ten, eleven and thirteen, than the total number of children of these ages reported in the school enumeration, which suggests that the school census is incomplete, and in nowise gives all the children in the city of a given age.

However this may be, it appears that the school breaks down even before the fifteenth year. Indeed, to such an extent does the school fail to attract, that 26.69 per cent of the children fourteen years old, 56.01 per cent of those fifteen, 73.45 per cent of those

TABLE I.

| | Ages. | | | | | | | | | | | | | Totals. |
|---|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| School Enumeration, 1909, | 10,295 | 9,255 | 9,552 | 8,917 | 9,197 | 8,572 | 9,769 | 8,859 | 8,696 | 8,017 | 8,626 | 8,664 | 8,225 | 115,984 |
| Number in Private and Parochial Schools, 1908-1909, | 1,804 | 2,328 | 2,762 | 2,654 | 2,842 | 2,721 | 3,203 | 2,722 | 1,860 | 1,035 | 675 | 452 | 397 | 25,455 |
| Number in Public Schools, 1908-1909, | 8,706 | 6,154 | 6,891 | 6,723 | 6,758 | 6,358 | 6,772 | 6,455 | 4,531 | 2,505 | 1,611 | 935 | 390 | 84,789 |
| Number in Public, Private and Parochial Schools, 1908-1909 | 10,510 | 8,482 | 9,653 | 9,377 | 9,600 | 9,079 | 9,975 | 9,177 | 6,391 | 3,540 | 2,286 | 1,387 | 787 | 90,244 |
| Number in the School, 1908-1909, | —218 | 773 | —101 | —460 | —403 | —507 | —296 | —318 | 2,215 | 4,477 | 6,340 | 6,677 | 7,438 | 25,710 |
| Per cent in the School, | | | | | | | | | 26.69 | 56.01 | 73.45 | 81.39 | 90.18 | |
| Per cent in Public Schools, 1908-1909, | 84.56 | 66.49 | 72.14 | 75.4 | 75.48 | 74.17 | 69.12 | 77.86 | 52.65 | 31.24 | 18.67 | 11.50 | 4.74 | 31.88 |

sixteen, 81.39 per cent of those seventeen, and 90.18 per cent of those eighteen years of age, are neither in public, private nor parochial schools. Of the children fourteen to eighteen, sixty-five out of every hundred are subject to no school influence whatsoever, and at a period of life, too, when children are most plastic, when the foundations of future efficiency are laid, when habits controlling later action are fixed, when attitudes of mind are formed, and character is determined. Worse still, of the children between fourteen and sixteen, inclusive, not one child in two attends school, and this at a time when, as shown by the Massachusetts Industrial Commission, the child is practically industrially worthless—an economic loss and a loss in human worth and happiness permitted nowhere else save in prodigal America.

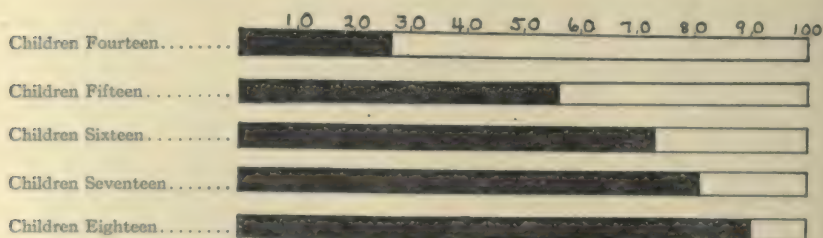


FIG. 1.—Black shows per cent of all the children of Cleveland of each age from fourteen to eighteen attending no school whatsoever in 1908-09.

It would therefore seem that, on the whole, public, private and parochial schools in Cleveland together are reaching to a greater or less extent the children of the community between six and thirteen, inclusive, yet were the facts at hand, these would doubtless show that a considerable number of children eleven, twelve and thirteen attend no school, and when it comes to children beyond thirteen, it can be said unhesitatingly, that all the education institutions of the city, together, are accomplishing but slightly more than half of the whole task of the school, that is, they are reaching but few more than half of the children of the city between the ages of fourteen and eighteen.

The public schools of Cleveland alone, it will be observed, are reaching in one way or another but 56 per cent of all the children

of the community between the ages of six and eighteen. Of the children between six and fourteen, the elementary school is reaching only 71.48 per cent, while the high school is bringing under its influence but 16.52 per cent of those between fifteen and eighteen.

To be sure, the public school is not the only institution that can give a good education, yet the fact that 29 per cent of the children of the community are receiving their elementary education apart from the public school, and that 65 per cent of the youth of the city between fourteen and eighteen are receiving no public school education whatsoever, is worthy of attention and serious consideration.

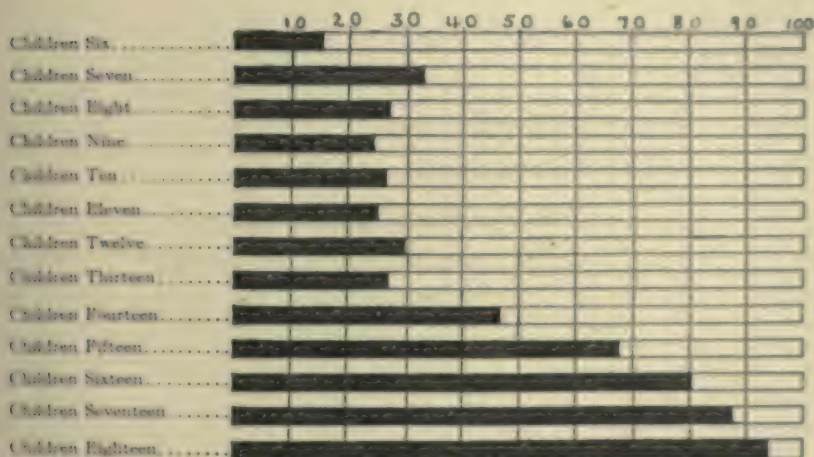


FIG. 2.—Black shows per cent of all the children of Cleveland of each age from six to eighteen not attending the public school in 1908-09.

Whatever opinion may be held with regard to the schools of a given city, a school census such as the foregoing gives a definite picture of the number of the children of each age to be reached, the number of each age reached, and the number of each age not reached; it also supplies data needed in planning improvements, and, when taken in connection with the census for other years, supplies the basis of judging whether or not the efficiency of the system with respect to reaching the children of the community is increasing or decreasing.

Attaining Efficiency: Holding the Children in School

An efficient school system must not only reach all the children of the community, but, in view of our second standard of efficiency, it must also hold children in school until they have gained a complete elementary, if not, a complete high school education. Hence the efficiency of a school system may be measured by the number of grades completed by children before they drop out permanently. The number of grades a child completes depends, however, very largely upon the number of years he remains in school, and upon the regularity of his attendance.

Increasing the Number of Days Attended During the School Year

Irregular attendance has seldom been looked upon as a measure of the school; it has been more often regarded as a delinquency of the child. However that may be, that school system is undoubtedly the most efficient which holds its pupils in school the largest number of days in the school year.

TABLE II.

| Attending. | Pupils. | Per cent of Enrollment. |
|------------------------|---------|-------------------------|
| 200 days..... | 1,312 | 1.74 |
| 180 to 200 days..... | 34,908 | 46.20 |
| 160 to 180 days..... | 12,930 | 17.11 |
| 140 to 160 days..... | 6,099 | 8.07 |
| 120 to 140 days..... | 3,746 | 4.96 |
| 100 to 120 days..... | 2,797 | 3.70 |
| 80 to 100 days..... | 3,165 | 4.19 |
| 60 to 80 days..... | 2,570 | 3.40 |
| 40 to 60 days..... | 2,696 | 3.57 |
| 20 to 40 days..... | 2,772 | 3.67 |
| Less than 20 days..... | 2,564 | 3.39 |
| Total..... | 75,559 | 100.00 |

Attendance records are universally kept, but the chief use made of such records is, as a rule, to report on average daily attendance. Attendance reports which give only average daily attendance are valueless. To be of value, whether they be for the month or for the year, they must show the number of days each child is in at-

tendance. The reports of St. Louis are illustrative. Table II shows the number of days each child was in attendance in the elementary schools of St. Louis (white districts only) during the school year 1909-1910.

Whatever the per cent of average daily attendance reported by this or that city school system, it would appear from Table II that children in large numbers attend school only a small portion of the year. Each tenth child enrolled in the St. Louis schools in

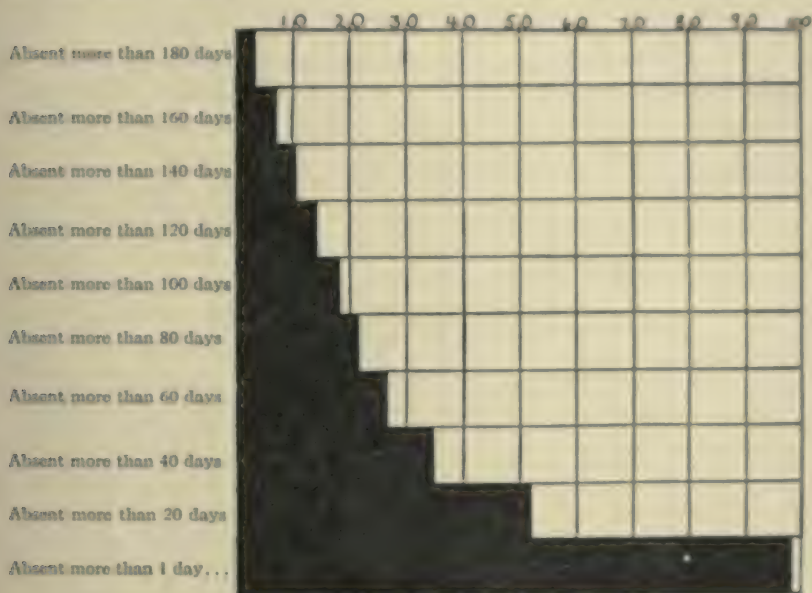


FIG. 3.—Black shows for 1909-10 the per cent of the total enrollment in St. Louis (white districts only) absent more than 180 days, more than 160 days, etc.

1909-1910 was actually in school less than sixty days; while one child out of each five attended less than half the time. Such facts, by recording actual conditions, not only show the need of making strenuous effort to hold more children in school a larger number of days, but also show the range of improvement.

With data such as are given in Table II at hand by months for each school in the system the weak schools may be located, and by studying conditions in these weak schools such changes may

be made as will materially increase attendance. Moreover, if data like those in Table II are collected and tabulated for the system as a whole for a number of years they become a reliable basis of judging whether the system is gaining or losing in holding power.

Table III shows for the elementary schools of St. Louis (white districts only) for the years 1906-1910 the per cent of the enrollment attending 200 days, 180 to 200 days, and so on.

Increasing the Number of Grades Completed

A city school system has attained a maximum of efficiency, in view of our second standard, only when it is giving to all the children of the community a complete elementary if not a complete

TABLE III.

| Attending. | 1905-6. | 1906-7. | 1907-8. | 1908-9. | 1909-10. |
|------------------------|---------|---------|---------|---------|----------|
| 200 days..... | 4.66 | 4.44 | 3.44 | 3.11 | 1.74 |
| 180 to 200 days..... | 45.86 | 43.14 | 45.76 | 45.09 | 46.20 |
| 160 to 180 days..... | 13.83 | 15.76 | 15.95 | 17.40 | 17.11 |
| 140 to 160 days..... | 7.26 | 7.63 | 7.73 | 8.19 | 8.07 |
| 120 to 140 days..... | 4.48 | 4.86 | 4.65 | 4.96 | 4.96 |
| 100 to 120 days..... | 4.25 | 4.21 | 3.80 | 3.84 | 3.70 |
| 80 to 100 days..... | 5.03 | 4.39 | 3.87 | 3.97 | 4.19 |
| 60 to 80 days..... | 3.29 | 3.51 | 3.27 | 3.43 | 3.40 |
| 40 to 60 days..... | 3.85 | 3.97 | 3.86 | 3.45 | 3.57 |
| 20 to 40 days..... | 3.73 | 4.33 | 4.43 | 3.36 | 3.67 |
| Less than 20 days..... | 3.76 | 3.76 | 3.24 | 3.20 | 3.39 |

high school education. How far we are at present from this degree of efficiency is suggested by Dr. Leonard P. Ayres who estimates that on the average 49 per cent of the children entering the schools of fifty-nine cities of the country never go beyond the seventh grade of the elementary school, while Dr. Edward L. Thorndike estimates that on the average, in sixteen of our largest cities, but 33 per cent ever enter the eighth grade.

Until very recently no attention was given to how much education the children of the community were actually receiving, and even after a decade of agitation not more than two or three large cities have as yet taken any steps to find out these facts. Obviously, if school authorities are to know where the school breaks down, if

they are to make intelligent changes in the system in view of better adapting it to the needs of all the children, and if they are to have at hand the means of judging whether or not there is an increase in efficiency, records must be provided and data collected year by year on the number of terms of work to the credit of pupils leaving the school permanently. Cleveland has made a beginning in this direction.

Table IV shows the life history in numbers of the pupils entering the first grade of the public schools of Cleveland for each of the years 1889-1898, and shows what per cent of the pupils enrolled in the first grade during these ten years completed less than two grades, less than three grades, and so on through the elementary and high school.

It will be observed, when the official records are taken as the basis of judgment, that, for the ten year period under consideration, of all the pupils enrolled in the first year classes, 28.5 per cent completed in the public schools of Cleveland less than two grades, 29.5 per cent completed less than three grades, 31.8 per cent less than four grades, 42.9 per cent less than five grades, 53.8 per cent less than six grades, 64.9 per cent less than seven grades, 75 per cent failed to complete the elementary school, 84.5 per cent failed to finish the first year in high school, 89.6 per cent to finish the second year, 92.4 per cent the third year, and 94.8 per cent failed to graduate from high school.

In other words, half of the citizens of Cleveland, when judged by the records of the public schools, are taking up the duties of life with only the education afforded by the fifth grade, but one in four has enjoyed a complete elementary education, and less than one in seven has to his credit any high school work whatsoever—a condition which raises social and civic questions of the gravest character.

With these and other facts before them, the school authorities of Cleveland instituted a number of important changes. In the elementary schools the course of study was simplified; the number of classes for defective pupils was increased; a system of quarterly promotions was installed; a method of promotion was instituted which both takes into account all the abilities of the child, and permits bright pupils to advance through the school more rapidly than slow or normal pupils; backward and over-age pupils were

TABLE IV.

| GRADE ELEMENTARY SCHOOL. | | | | | | | | | | YEAR HIGH SCHOOL. | | | | |
|--------------------------|---------|---------|--------|---------|--------|--------|----------|---------|--------|-------------------|--------|---------|------------|-----------------|
| Year Entered. | First. | Second. | Third. | Fourth. | Fifth. | Sixth. | Seventh. | Eighth. | First. | Second. | Third. | Fourth. | Graduated. | Year Graduated. |
| 1888-9..... | 7,785 | 6,196 | 5,771 | 5,405 | 4,094 | 3,509 | 2,891 | 2,024 | 1,252 | 877 | 567 | 468 | 435 | 1900 |
| 1889-90..... | 8,333 | 5,091 | 5,382 | 5,259 | 4,594 | 3,922 | 2,852 | 1,973 | 1,292 | 871 | 536 | 477 | 403 | 1901 |
| 1890-1..... | 10,468 | 7,116 | 7,277 | 5,990 | 5,552 | 4,386 | 3,335 | 2,373 | 1,463 | 941 | 604 | 530 | 478 | 1902 |
| 1891-2..... | 10,197 | 7,515 | 6,881 | 6,890 | 5,795 | 4,564 | 3,488 | 2,460 | 1,515 | 996 | 638 | 565 | 485 | 1903 |
| 1892-3..... | 9,341 | 7,123 | 7,185 | 6,853 | 5,789 | 4,637 | 3,512 | 2,555 | 1,512 | 996 | 714 | 625 | 514 | 1904 |
| 1893-4..... | 9,422 | 7,103 | 7,061 | 7,120 | 5,875 | 4,640 | 3,548 | 2,472 | 1,437 | 933 | 727 | 648 | 515 | 1905 |
| 1894-5..... | 9,976 | 7,527 | 7,339 | 7,267 | 5,957 | 4,849 | 3,583 | 2,519 | 1,584 | 1,056 | 851 | 717 | 559 | 1906 |
| 1895-6..... | 10,830 | 7,908 | 7,851 | 7,751 | 6,454 | 5,278 | 3,837 | 2,708 | 1,716 | 1,251 | 933 | 752 | 591 | 1907 |
| 1896-7..... | 11,720 | 8,074 | 7,908 | 7,782 | 6,522 | 5,108 | 3,893 | 2,820 | 1,741 | 1,277 | 928 | 740 | 611 | 1908 |
| 1897-8..... | 12,257 | 8,129 | 8,164 | 8,108 | 6,671 | 5,511 | 4,312 | 3,222 | 2,074 | 1,334 | 936 | 821 | 671 | 1909 |
| Totals..... | 100,329 | 71,782 | 70,819 | 68,425 | 57,303 | 46,404 | 35,251 | 25,126 | 15,587 | 10,532 | 7,434 | 6,343 | 5,262 | |
| (a)..... | | 71.5 | 70.5 | 68.2 | 57.1 | 46.2 | 35.1 | 25.0 | 15.5 | 10.4 | 7.4 | 6.3 | 5.2 | |
| (b)..... | | 28.5 | 29.5 | 31.8 | 42.9 | 53.8 | 64.9 | 75.0 | 84.5 | 89.6 | 92.6 | 93.7 | 94.8 | |

(a) Per cent of enrollment in first grade advancing into each grade.

(b) Per cent of enrollment in first grade leaving before completing the grade.

NOTE: The data here used are taken from the official records of the Board of Education. The per cent of pupils leaving permanently is, however, without doubt too high, due to the treatment of first grade pupils and to including transfer.

segregated in separate buildings, and a regime and courses of study provided suited to their particular needs; and a system of elementary industrial schools was established for pupils who were fourteen years of age and who had not completed the work of the sixth grade. In the high school, the school day was lengthened and both technical and commercial high schools were opened. That over-age pupils both in the elementary school and in the high school might have opportunity to advance as far as possible in the work of the school

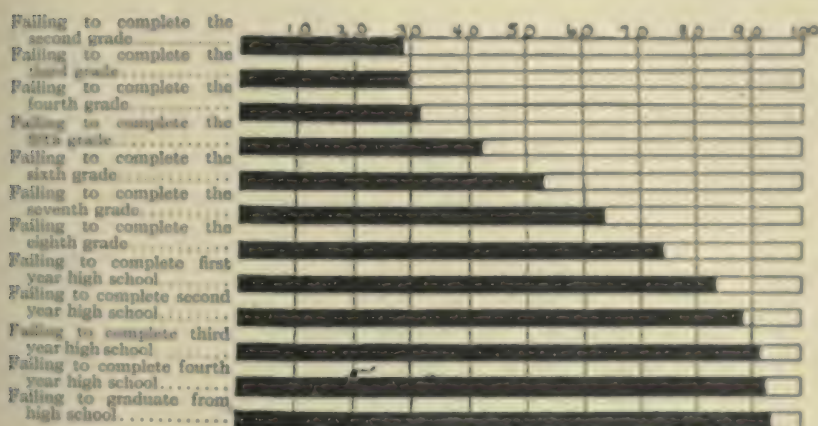


FIG. 4.—Black shows the per cent of pupils enrolled in the first grade of the public schools of Cleveland for the years 1889-98 failing to complete each of the several grades of the elementary school and of the high school.

before dropping out, the school year was shortened to thirty-six weeks—three terms of twelve weeks each, and a summer quarter correlating with the other quarters of the school year, and in which regular school work is done, were instituted. The effects of these and other changes upon the number of pupils withdrawing during the course of the school year, and hence failing to complete in the public school the work of the given grade is shown in Table V. This table shows for the year 1909, and for the year 1910, exclusive of the enrollment in special classes, the per cent of the total enrollment, in each grade of the elementary school and in each class of the high school, withdrawing during the course of the school year.

Attaining Efficiency: Improving Instruction

An efficient city school system must not only hold children in school until they have completed the work of the elementary school, if not of the high school, but, in view of our third standard of efficiency, the quality of instruction must be of the best. There is scarcely a city school system in the country which, within late years, has not been criticised because of the quality of its instruction, particularly in the "three R's." So virulent had this criticism become in Cleveland, that, in 1905, an Educational Commission was appointed to investigate the schools of the city.

The Educational Commission, in order that it might more accurately judge of the work of the schools, gave a spelling test in the winter of 1905, of fifty words to the eighth grade pupils of four schools. The words given were such as, in the mind of the commission, children completing the common school should be able to spell. Of the one hundred and forty-four pupils taking this examination, only one spelled all the words correctly, while the combined errors of the one hundred forty-four were 1,887, or an average of 13.1 misspelled words per pupil. The Educational Commission made no direct comment upon these results, but a grade of 73.79 per cent was sufficiently suggestive to those in authority.

A careful study was at once made of the time allotted spelling in the daily program of the schools, of the character of the words taught, and of the methods used. As a result of this study, steps were taken to limit spelling to words the child ordinarily uses, to those he hears regularly employed in conversation, to those found in the other studies of the school, and to those the average citizen will find of use in daily life. A system of experiments running through the greater part of a school year was carried on to determine through actual class-room experience what words should be taught and which of these were difficult and which easy for the children. On the basis of the several different reports from each of more than 1,500 teachers, the words to be used in each grade from the third through the eighth were finally fixed upon; these were divided into two groups, principal, or difficult words, and subordinate, or easy words, and arranged into spelling lessons, each lesson consisting of ten words, two principal words and eight subordinate words. Both teachers and pupils were directed to devote most of the spelling period to the mastery of the two principal words and to give but

minor attention to the subordinate words. Reviews, particularly of the principal words, were made a prominent feature of the instruction. While no change was made in the time assigned spelling in the daily program, teachers were aroused to the importance of spelling, and an interest excited in the children to become good spellers.

On December 10, 1906, there was held what was termed the First Spelling Contest, or the first test of the efficiency of the new work in spelling. This examination consisted of fifty written and five oral words, respectively, for the children of the fifth, sixth, seventh and eighth grades; the test words for each grade were selected from their spelling work for the term. This spelling contest was followed May 24, 1907, by an Annual Contest in which

TABLE VI.

| | Pupils Examined. | Number of Words. | Average Number Misspelled Words per Pupil. | Average Per cent of Efficiency. |
|--------------------------------------|---------------------|---------------------|--|---------------------------------------|
| Commission's Test ¹ | 144 | 55 | 14.414 | 73.79 |
| First Spelling Contest..... | 3,148 | 55 | 7.287 | 86.75 |
| First Annual Contest.... | 2,806 | 55 | 6.116 | 88.97 |
| Second Annual Contest... | 3,494 | 55 | 1.589 | 97.11 |
| Third Annual Contest... | 3,529 | 55 | 1.675 | 96.96 |

all the children of the four grammar grades participated. The test for each grade consisted of fifty words to be written and five words to be spelled orally, or a total of fifty-five. The words used were selected from the work of the year for the respective grade. Similar annual spelling contests were held March 23, 1908, and May 25, 1909.

Table VI shows the number of children participating in the Educational Commission's test, the number of words given, the average number misspelled per pupil, and the average per cent of efficiency; also the same facts for the first and the three annual contests in the eighth grade.

It will be observed that the average number of misspelled words per pupil in tests of fifty-five words was reduced for the eighth

¹Translated into terms of fifty-five words.

grade from 14.414 to 1.675, an average decrease per pupil for all eighth grade children of 88.37 per cent. In other words, the children taking the Commission's test in 1905 misspelled on the average 8.6 times more words than the children taking the Annual Contest in 1909.

On the other hand, the average efficiency in spelling, as based upon these tests, which it is believed were equally representative and equally difficult, was raised from 73.97 per cent to 96.99 per cent, an average increase for each child of the eighth grade of 23.17 per cent, which is an average gain in efficiency per pupil of 31.39 per cent.

That the efficiency of the work in spelling might be still further tested, there was given to all eighth grade pupils, May 17, 1909, the spelling examination which was set to the corresponding grade

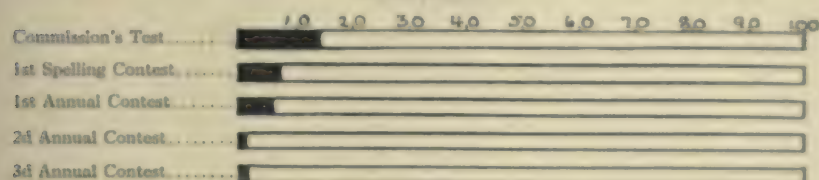


FIG. 5.—Black shows average number of words misspelled per pupil in each test from Educational Commission's Spelling Test, 1905, to Third Annual Spelling Contest, 1909.

of pupils of the Cleveland schools, July, 1858. The test consisted of twenty words. Table VII gives the number of pupils examined, the average number of misspelled words, and the average per cent of efficiency in each case.

TABLE VII.

| | Pupils Examined. | Average Number Misspelled Words per Pupil. | Average Per cent of Efficiency. |
|--------------------------|------------------|--|---------------------------------|
| Examination of 1858..... | 143 | 5.215 | 73.92 |
| Same in 1909..... | 3,240 | 4.307 | 78.46 |

The children of 1909 were at a disadvantage in taking this examination, for the words employed were selected from the spelling

work of 1858 and were for this reason familiar to the children of that year. Notwithstanding this, the children of 1858 misspelled on the average practically one more word per pupil than those of 1909, giving the children of 1909 a better average efficiency mark by 4.54 per cent, which represents an average gain in efficiency of 6.12 per cent. In a word, this test not only furnishes evidence of increased efficiency in spelling, but also shows that the children of 1909 were better spellers than the children of 1858.

Attaining Efficiency: Minimizing the Cost

Finally, an efficient school system must educate the children of the community at a minimum cost to the taxpayer. Little attention as yet has been given to this aspect of efficiency. In consequence the cost of the same work in a given system may be very much greater in one school than in another.

Table VIII shows the variations in the per capita cost of kindergarten occupation materials for the first half-year of 1910-11, for fifty-six Cleveland schools, also the number of these schools having a given per capita cost:

The facts of Table VIII are significant, not merely because they record the variation in the cost of kindergarten occupation materials, but because they raise important questions: Why are there such variations in cost in the same system? How does the instruction compare in a school where the per capita cost is four cents with the instruction in a school where the per capita cost is sixty-three cents? What is the cost in the schools where the instruction is the best? These questions are significant because they

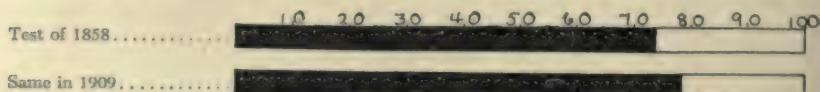


FIG. 6.—Black shows per cent of efficiency in Spelling Test given in Cleveland Schools in 1858, and in the same re-given in 1909.

supply, along with data acquired through testing the quality of instruction, the basis of determining what the cost of such material should be, of locating the schools that are spending too little and the schools that are spending too much, and hence, of reducing the cost of such materials in all schools to the lowest point consistent with the best results.

The facts of Table VIII are also significant because they suggest the lack of standards of cost in education in general, and because they indicate that a school system can only become efficient financially as similar data are collected on each kind of instruction in each kind of school, and as such facts are used, along with data derived from qualitative tests of instruction, to determine standards of cost, and to locate and eliminate financial waste.

TABLE VIII.

| Number of Schools. | Per Capita Cost of Kindergarten Occupation Materials. | Number of Schools. | Per Capita Cost of Kindergarten Occupation Materials. |
|--------------------|---|--------------------|---|
| 2 | 4 cents | 3 | 19 cents |
| 1 | 6 " | 4 | 20 " |
| 1 | 7 " | 1 | 21 " |
| 3 | 8 " | 1 | 22 " |
| 2 | 9 " | 1 | 23 " |
| 1 | 10 " | 3 | 24 " |
| 3 | 11 " | 3 | 25 " |
| 1 | 12 " | 2 | 26 " |
| 5 | 13 " | 2 | 29 " |
| 3 | 14 " | 2 | 32 " |
| 1 | 15 " | 1 | 38 " |
| 4 | 16 " | 1 | 45 " |
| 3 | 17 " | 1 | 49 " |
| 1 | 18 ² " | 1 | 63 " |

Attaining Efficiency: The Method

From the foregoing discussion, the main points in the method of attaining efficiency in a city school system may be readily inferred. There is involved, first, the collection of data on the number of children the school should reach, on the number of children the school is reaching, on the amount of schooling the children are actually receiving, on the quality of instruction given, and on the cost; there is involved, second, the interpretation of these facts and their use in fixing upon new administrative plans, in providing new kinds of schools and new courses of instruction, and in devising new methods of teaching; and, third, there is involved the measurement of the results attained through the new plans, the new schools, the new courses, and the new methods, to the end that the data thus derived may be used in judging of their worth and in providing for the further improvement of the system.

²Average per capita cost.

EFFECTIVE CHARITY ADMINISTRATION

BY L. A. HALBERT.

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The Field of Municipal Charity

It is impossible to discuss the subject of efficiency in the administration of municipal charities without considering how the work done by the municipality is to be related to the activities of county and state agencies and also of private agencies. The first practical question then is, what is the proper function of the city in the field of charitable endeavor? Should the city government give outdoor relief? Should it maintain a municipal lodging house? Should it maintain institutions for delinquent children? In fact, we might ask a long list of such questions as these. Of course, it is impossible to reply to them categorically, but we may lay down the general principle that it is desirable to have the various charitable institutions as highly sub-divided and specialized as is consistent with a reasonable degree of economy. Therefore, the political unit of administration in charitable matters should be large enough so that the number of unfortunate people in each specialized class is large enough to warrant a separate institution for them. Where a city does not furnish, on account of its limited population, a large enough political unit so that specialized institutions are practical, it is evident that the charitable institutions should be developed as county or state institutions so that the larger unit will allow of finer classification. Of course this condition of having a large political unit for the basis of charitable institutions would naturally always be in favor of state institutions for the unfortunate classes, but the disadvantage in having state institutions to serve the interests of a large city is that the operations of the state are slower and more inflexible. This tendency may be illustrated in Missouri by the fact that both St. Louis and Kansas City have had to develop special institutions for delinquent children, although the state has an Industrial School for Boys and an Industrial School for Girls. St. Louis also has had to develop a local insane asylum, although the state has three. The city council, or commission, as the case may be, meets more often than the state

legislature and the need for charitable agencies becomes known throughout the community much more quickly in a compact city than it does in a state which includes a large rural population. No large city can care for its unfortunate classes efficiently if it is wholly, or even very largely, dependent for such care on state agencies. If there is an adequate state agency for any particular class of unfortunate people, of course the city should be glad to utilize such an agency and to bear its just share of the expense connected with supporting it. The same inflexibility which makes the state institutions respond too slowly to local demands is sometimes urged as a desirable consideration in connection with charitable work, because it makes the charitable agencies more free from direct political pressure or corrupting influences. This principle may be illustrated in a line of work closely related to charitable endeavor, by calling attention to the work of the New York Tenement Commission, which gets its authority from the state, because municipal political influences are considered hindrances to efficient work. In my judgment, the danger from petty politics can be eliminated from municipal affairs by independent voters' leagues, municipal bureaus of research and the extension of the civil service merit system, better than it can be evaded by resorting to unresponsive state machinery.

Sociological Investigation

The question as to how much machinery or what kind of machinery is needed to properly care for the unfortunate people of the city can only be determined by a scientific sociological investigation into the conditions of living to ascertain the extent of misery in the city and the most effective means of checking it or dealing with the particular forms of it that prevail in a given city. Therefore, I would say that no city can deal efficiently with the problem of charity without maintaining the necessary machinery for continuous research into its own social problems. It should not be satisfied with special investigations of glaring evils nor with occasional surveys of the whole field, but it should so record the life of the people that it can measure the rise and fall of poverty and of such defects as blindness, feeble-mindedness, or the changes in the number of cripples that are in the community, or even measure the volume of unemployment. It seems to me that we can never deal with the problems of poverty or any other social problem in a thoroughly scientific way without

coming to the place where we maintain a continuous registry of the entire population and enter the facts with regard to every family or detached individual. If a thorough-going system of sociological accounting showed that misery was on the increase, we would know that our industrial and economic machinery was inefficient. There can be no testing of the efficiency of our social machinery unless we have a continuous record with regard to social conditions.

A City Plan for Charity Work

It is plain from all that has been said thus far that no city can effectively care for its unfortunate classes without taking a vigorous interest in making the private, state and national agencies with which its work must be co-ordinated, equally effective with its own agencies. If there are deficiencies in these agencies, the city may be compelled to make up for them by increasing its own activities, but if the condition of inefficiency in these other agencies seems temporary, the provisions which the city makes to meet emergencies should be temporary in their nature and as inexpensive as possible. The duty of making up for the shortcomings of private agencies presents a different problem, however, from the duty of making up for a temporary deficiency in any state or county agency, because, if the need which is inadequately met by private charities is a real need, and if there is any sentiment in the community to the effect that the burden of this should be transferred from private charity to the public treasury, it should be recognized that it is just that the burden of caring for the poor should be laid upon the entire community through taxation rather than be provided for by the voluntary gifts of the generous minority. If the private charities are unable or unwilling to bear the burdens they have assumed they should reduce their plans to what they can handle effectively, and then hand over to the city, to be conducted by the city, any activity for which they are unable to provide. Civic pride or sentiment should never influence any city to start a charitable institution, but a city should only enter into such an activity when the need is such as makes it practically a necessity. It is possible to forecast the future needs of a city more or less by careful study, and it is also possible to weave the various public and private activities into a unified system if sufficient care is taken. In other words, there should be made a city plan for charitable

activities as well as for parks and playgrounds or any other form of social activity.

In Kansas City the investigation which the Board of Public Welfare must make in order to be prepared to pass upon the merits of private institutions furnishes to the board a complete knowledge of the extent and nature of the charitable work being done in the city. The desire on the part of the private charities to be endorsed by the Board of Public Welfare makes them more or less open to suggestions, as to how their charities should be related to each other, and as to what would be the wisest policy for them to pursue. This helps to give a general unity and comprehensiveness to the charity work of the city.

Subsidies to Private Charities

While the private agencies are never entirely supported by funds from the city treasury, the practice of making appropriations to private charitable agencies from the city treasury exists in certain cities. The giving of such subsidies may at first thought seem to be just and reasonable. New York City and Washington, D. C., have both had long and illuminating experiences with this custom. Dr. Amos. G. Warner, formerly Superintendent of Charities for the District of Columbia, and author of that standard work, "American Charities," took a stand distinctly against public subsidies to private charities. A report by the New York State Charities Aid Association in 1899 says:

We desire to state that a careful study of this question has convinced us that the plan of granting public subsidies to private institutions has inherent and grave dangers which it is impossible to obviate, and that no plan can be devised which will insure wholly satisfactory results. We find that appropriations of public funds to private institutions inevitably tend to diminish and discourage private charity; that the system confuses the duties of the public authorities and of private citizens and private organizations, and prevents any clear division of the field as between public and private effort; that it encourages the growth of privately managed but publicly supported charities to an unlimited and harmful extent; that although often apparently economical in the beginning, it is always in the long run enormously expensive; that it indirectly prevents a proper equipment and maintenance of the public charitable institutions; and that its permanent disadvantages far outweigh any immediate and temporary benefits that may be derived when the system is first established. (Revised Edition Warner's American Charities, 1908, page 406.)

Dr. E. T. Devine, Secretary of the New York Charity Organization Society and editor of *The Survey*, published a leading editorial in that paper for December 23, 1911, in which he takes a positive stand against public subsidies for private charities. This whole matter has been so well discussed in the proceedings of the National Conference of Charities and Corrections and other places that it is not necessary to repeat the discussion here. It may be said briefly that the consensus of opinion among scientific charity workers is that no city that wishes to get the best results for its money will provide subsidies to private charities as a permanent policy.

The Control of Public Solicitation

Most large cities, where it is impossible for the business men to have personal knowledge about all the private charities, feel the need of doing something to regulate charitable solicitation in the community. Cleveland has developed a quite efficient system of supervision over the private charities through the agency of the Chamber of Commerce. It investigates the various private institutions and advises the public as to which ones are worthy of public support, and it even takes some active steps to suppress fake charity solicitors. It conditions its endorsement upon the observance of certain standards by the private charities which ask for public subscriptions. There has been some discussion about the advisability of having this committee of the Chamber of Commerce undertake to absorb the budgets of all the private charities into one big budget and apportion the funds according to the needs of the various charities, but this plan has not been adopted. In Denver, the various recognized charities of the city have attempted for years to raise their combined budgets through one central appeal. A leading charity worker who is familiar with the charity organization in Denver comments on the plan as follows:

When Denver started on its plan of raising all the money it was to use in the city for charitable purposes through one agency, there was a budget of about thirty thousand dollars. If I am correct the experience is quite clear in showing that the increase of gifts to this central fund does not keep pace with the increase of need. I understand that twenty years ago the project covered the expenses of the different agencies. In the last annual report of the Denver Society, which I advise you to secure, it shows that in the last eleven years the proportion raised by the central agency for the different organizations dropped from forty-five per cent in the year 1900 to a little less than twenty-nine per

cent in the year 1910. In other words, the societies in this group, which number twenty-one, in the year 1900 raised fifty-five per cent of their income outside of the central organization and in the year 1910 raised about seventy-one per cent independently of their agreement with the central body.

My criticism against the plan is two-fold. In the first place as shown by Denver, I believe the thing to be impracticable. Take the Denver Orphans' Home for instance. It looks upon the subscription from the central committee as simply one of its various subscriptions, one from which it receives three thousand dollars, while it must receive fifteen thousand from other sources. On one hand it can neither keep its promise not to solicit from the community nor does it feel under any particular obligation to the central council for its financial methods. My further objection is from the point of view of the organized charity end. Every one of the societies, excepting what they call the central office, is free to go out to non-subscribers. The central office doing the work in the community of organized relief is prohibited from so doing. It results in sucking all the life out of the central office. There is no way to bring to the attention of the community the work of organization more effectively than in the pleas for specific objects such as come so often to the office of the organized charity, and with that possibility cut off, the income is necessarily curtailed and the co-operation between the central office and the community is reduced to almost a vanishing point.

In *The Survey*, September 18, 1909, Mr. Francis H. McLean, who was at that time field secretary of the Charity Organization Department of the Russell Sage Foundation, describes a plan somewhat different from this which seems more practicable. The plan is for the leading commercial organization to agree that, so far as the members of its own organization are concerned, they will all make their contributions to a central fund to be administered by their own committee and apportioned by it to the various charities in accordance with their best judgment. This would enable them practically to control the charitable program of the city and would give the public the benefit of their judgment without in any way limiting the action of those outside of their own organization and without limiting the activities of the various individual charities in soliciting money from people outside of the commercial body.

In Kansas City the Board of Public Welfare, which is a regular municipal department, is charged by ordinance that it "shall from time to time investigate as to the efficiency and merit of any organizations soliciting funds or other property for charitable purposes, and upon application therefor the Board may issue cards in such form as the Board may adopt, endorsing such organizations as worthy of confidence and assistance. And all organizations receiving such cards shall in manner and form as required by said

Board report in writing to the Board as often as required, stating the uses and purposes to which said funds or other property have been, or are to be, applied." In accordance with this law the Board of Public Welfare has investigated 59 charities and endorsed 41 of them as worthy of public support. These endorsed charities have been printed on a stiff card and furnished to all the business houses in such form as can be used for their ready reference. The unendorsed charities have most of them ceased to be. It is not only desirable to suppress fake charities but also to discourage any charitable enterprises that are unwise and to regulate those that are badly managed or wasteful, even though their motives may be good.

The practice of soliciting money from saloons, which has been carried on by certain women mission workers, has been prohibited in Kansas City by an order of the chief of police. In Massachusetts the Legislature of 1909 passed the following law which went into effect July, 1909:

An Act Relative to the Receiving of Alms in Public Places in the City of Boston.

SECTION 1. No person shall receive contributions of money, food, clothing, or other articles or things in or upon any part of the streets, parks, public grounds or other public places within the limits of the city of Boston, except upon such terms and conditions and within such times and places as may be prescribed by a license granted therefor by the overseers of the poor and approved in so far as it relates to times and places by the police commissioner of said city; and a person so receiving without a license who is unknown to a police officer in whose presence the offense has been committed may be arrested by such officer without a warrant.

SECTION 2. Any violation of this act shall be punished in accordance with the provisions of section forty-six of chapter two hundred and twelve of the revised laws, or by a fine not exceeding twenty dollars.

Under this law, the overseers of the poor granted licenses to the solicitors of the Salvation Army, in which they stipulated among other things that a thorough accounting for all funds raised or used by the Salvation Army for charitable purposes should be rendered to the overseers of the poor.

Suppressing Vagrancy

The practice of begging on the street for individual alms is prohibited in nearly all cities. But in many instances the regulation is not strictly enforced, largely because the police and the public

are not fully convinced that the charitable machinery of the city is so adequate as to make such begging absolutely unnecessary. As a matter of fact, the police should refer all beggars to the principal relief agency of the city and warn them that if they are found begging again they will be arrested, and this policy should be strictly adhered to. This policy was followed with a marked degree of success in the City of New York from June 4, 1902, to February 5, 1906. During most of that time seven police officers were detailed to work in direct co-operation with the Charity Organization Society for the express purpose of suppressing street begging. Mr. Frederick B. Jennings, chairman of the Mendicants Committee of the Charity Organization Society, said at the close of that period:

In the three years and a half since the beginning of this closer co-operation of the police department with this Society, the situation has been absolutely different. . . . Except in a few instances in which we have ourselves asked for a warning in court or for a suspended sentence, practically all who have been arrested and prosecuted on our complaint, through the officers of the Mendicancy detail, have been convicted, sentenced to six months' term, and have served their sentence. In the fifteen months ending Sept. 30, 1905, there were, as we have already written you, 1,863 such arrests, while the entire police force outside the Mendicancy detail were reported to have arrested only 565 persons on a charge of vagrancy. In the month of January of this year there were 195 arrests by the officers of the Mendicancy detail. The Mendicancy detail was abolished on Feb. 5th. In the remainder of that month, a period of twenty-four days, there were reported to have been made only thirty arrests by the police officers, and there is already a very considerable increase of street begging in many neighborhoods.

The report of the commission on "Minor Offenses in Michigan, Conditions and Remedies," appointed in 1909, gives numerous helpful suggestions with regard to vagrancy and, among other things, mentions the importance of having a mendicancy officer. In Kansas City the police department appointed an employment officer in the fall of 1910 and the number has now grown to four. They keep a card record of transient men as they discover them, from day to day, make frequent inspections of the cheap lodging houses, and keep continual pressure on all the vagrants to make use of either the employment bureau or the public quarry, both of which are maintained by the Board of Public Welfare.

If the pressure brought to bear by mendicancy officers is to be effective, no free lodgings in mission halls nor any free soup kitchens

should be permitted; in fact, the standard of the cheapest lodging houses should not be permitted to fall below where each man gets a clean bed under sanitary conditions, and the use of the municipal lodging house, where it exists, should be carefully conditioned upon the patrons complying with a definite program of work. The Civic League of St. Louis published an interesting bulletin on the problem of street begging, December 29, 1911. In fact, there is an abundance of literature on this subject for those who wish to study it in greater detail.

A consistent policy, if strictly adhered to by any city, would result in driving the professional beggars to some other city. In fact, some cities have had the deliberate policy of paying the transportation of transient paupers out of town to the next important city. This policy has made it possible, in times past, for dishonest or lazy paupers to travel across the continent wherever they pleased without paying any railroad fare. At one time, it was common to ask the railroad companies to furnish passes for charity cases, but, in recent years, there have been pretty effective laws to prevent the railroad companies from dumping the paupers of one community onto another community by furnishing them free transportation. The associated charities or charity organization societies of the country have a mutual agreement which forbids the sending of a family that has become dependent in one community into another community to be cared for unless they have relatives there who promise in advance that they will care for them. In fact, the practice of beating their way on the trains is a very common one among vagrants, and the cities of the country have the problem of caring for the hoboes, complicated by this practice of stealing rides. The able-bodied vagrants should be compelled to work and even the cripples should be provided with special work suited to the handicapped. But a strict adherence to this policy in most communities would result in so much complaint against the constituted authorities that the ordinary citizens would probably provide help individually to those who should be subjected to the community's system of discipline. Therefore, efficiency in controlling the problem of vagrancy can only be achieved when an enlightened public sentiment is developed within the community. Besides this, there should be some mutual agreement between cities which will prevent the sending of paupers from one community to another,

unless the community to which they are sent is the one to which they actually belong. It seems doubtful if we will be able to get an absolutely comprehensive and binding agreement between all the leading cities to pursue such a policy, and it is therefore important that we should have state and national laws which will prevent any public or private charitable agencies sending a pauper on to some other community without having proper evidence that that community is his rightful abode. The method of sending them from place to place is expensive and relieves them from that close supervision which might succeed in reclaiming them from their condition.

Outdoor Relief

By public outdoor relief is meant the giving of groceries or other material relief from the public treasury to families in their homes without sending them to the poor farm or other charitable institution.

The giving of such relief is fraught with various dangers. Firstly, if relief comes too easily, it destroys the ambition of its recipients and relief becomes a substitute for work. Secondly, if relief is so given the underpaid workman that it acts as a substitute for what should be gotten in the form of better wages, then the benefits of charity go to the capitalist rather than to the poor. The more of such charity there is given the lower the rate of wages becomes. Thirdly, when public funds are spent for relief, it is very natural that those receiving the aid should be grateful to those who dispense it and should desire where possible to make some sort of return for it. Such return has often been made in the form of votes or political work to secure votes for the poor commissioners' party. This has commonly led poor commissioners to dispense relief with a direct view to securing political power, and the whole fund for poor relief degenerates into a mere political slush fund.

Relief should not be given without thorough investigation of the applicants and the maintaining of good case records and thoroughly constructive treatment of the aided families by a trained social worker. Thus far public outdoor relief has practically never been administered in this way in the United States. The various associated charities or charity organization societies of the country have developed the principles of scientific relief-giving to a high degree,

and it has been an ideal with many of them that they should furnish the necessary advice to relief-giving agencies so that their relief might be administered in the proper way. Most of them, however, have developed into relief-giving agencies themselves, and there is almost universal complaint among them that their funds are not adequate to maintain a proper standard of relief. In very few instances, if any, have the city or county authorities sought and consistently followed the advice of these scientific charity workers. In some cities the public funds have been turned over to the associated charities, to be administered by them, but this scheme carries with it the dangers of a public subsidy to a private institution, although it probably offers an improvement over ordinary public outdoor relief. In Kansas City the process has been directly reversed, and social workers for thoroughly investigating and supervising the applicants for relief are now furnished freely to any of the private charities by the Board of Public Welfare, and their work furnishes the chief basis for the relief of the Provident Association. In some places, where there has been a desire on the part of public officials to proceed cautiously in the problem of public outdoor relief, certain classes of cases have been selected for pensions. The last legislature of Kansas passed a law providing that the county commissioners might grant pensions to permanently disabled people. The last Missouri legislature passed a law establishing pensions for widows and women whose husbands were in prison, the rate being based on the number and ages of the children. The application of the law is restricted to Jackson County, the county in which Kansas City is located. England has recently established an extensive system of old age pensions. The almost universal inadequacy of the funds of private relief societies to maintain a decent standard of relief makes public outdoor relief a practical necessity in large cities. The report of the New York Commission on Congestion advocates a limited application of the system of public outdoor relief in that city, although that city has previously been held up as a conspicuous proof that it was practical and preferable for a city to get along without public outdoor relief. The discussion of this proposal for New York to enter upon some outdoor relief, which was contributed by various leading charity workers to *The Survey* of March 25, 1911, shows that there is a trend of feeling even among the best charity workers in the direction of an effort to solve the problems of the correct administration of

public outdoor relief, rather than to follow the policy of a total abolition of public outdoor relief, if indeed that policy were possible.

Preventing Destitution

There is no doubt that the chief attention of charity workers should be directed toward the prevention of destitution. In fact, if you consider the main cause of destitution, it can be shown how they can all be forestalled if proper plans are set on foot. Among the leading causes may be mentioned unemployment, widowhood and desertion, sickness and accidents, old age, low wages, and the monopolizing of the natural resources.

Unemployment can be met by employment bureaus, the establishment of public works where necessary and by unemployment insurance. Widowhood can be met by life insurance, widow pensions and the safeguarding of living husbands. Desertion can be greatly reduced if society will pay for relentless prosecution. The sickness of to-day is, much of it, preventable. Sick benefits should be provided for along with other daily necessities by membership in benefit societies. Accidents should be largely covered by workingmen's compensation laws and compulsory insurance. Old age pensions should be arranged by law, probably on a basis where the people would provide for them by contribution during their working years.

A number of states have machinery for the arbitration of controversies over wage scales. England and Australia have laws establishing boards with power to fix minimum wages. Wisconsin and Massachusetts have had commissions investigating the feasibility of such plan in their respective states, and the Massachusetts Commission has already reported in favor of the plan. The adoption of such a plan is one of the chief planks in the platform of the National Consumers' League. The tendency of the times is to attack the monopolizing of the natural resources through government regulation of corporations. It is also very interesting to note that both the report of the Commission on Congestion appointed by Mayor Gaynor, and the report of the Committee on Housing, adopted December 11, 1911, by the Pittsburgh Civic Commission, recommend a modified form of single tax as a means of improving the conditions of the poor.

In some eighteen different cities there are free legal aid societies. Kansas City has a Free Legal Aid Bureau as a regular public muni-

cial agency, to prevent the poor from being defrauded out of their just dues. During the first eight months of its existence it handled 2,314 cases at an average cost of 50 cents per case and collected \$6,046.46 for the poor. Provident loan agencies or public pawnshops are a part of the municipal machinery in some foreign countries, but have not yet been adopted in any American city, so far as I know, although they are being operated successfully by private enterprises in various cities.

By laying emphasis on these remedies outdoor relief can be reduced to a very low stage.

Social Service Work in Hospitals

A general hospital is a part of the equipment of nearly every city for caring for the sick poor. The hospital is, in a sense, a health provision for the people, but it is also a charitable institution. The treatment of individuals is not effective if they cannot secure the proper diet, fresh air and clean living quarters when discharged. The recovery of the people may even be hindered by unhappy social relations between the members of a family, or between a man and his neighbors. These conditions can only be remedied by the aid of a good social worker. There is always a question also as to who is entitled to free treatment. This should be determined on the same basis as other charitable relief. Dr. Richard C. Cabot of Boston has developed a social service department in connection with the Massachusetts General Hospital. The success of his experiment has been conspicuous and it has become an example to all charity hospitals. He began in October, 1905, with one social worker. He said, in June, 1911—"We now have nine paid workers and under these we have twenty-five volunteers. . . . As our work has gone on, it has gradually divided itself into a number of departments." He has named and described departments for tuberculosis, for nervous people, for the problems of sex, dealing particularly with the problems of unmarried mothers, and for teaching hygiene.

Institutional Problems

I have not attempted to say exactly what institutions any city should have, but it is inevitable that every city will have some. Whether they are hospitals, infirmaries, insane asylums, children's homes, or any other sort of institutions, they will all have certain

problems which are common to institutional life. The arrangement, construction and sanitation of buildings for such purposes have a great deal to do with their efficiency, but those problems are sufficiently discussed elsewhere and it is not necessary to embody them in this article. The same is true of the problem of diet. If the object of these institutions is to relieve human misery, their work must be tested by their success in serving this purpose. Some of the worst problems in all institutional life are connected with the matters of the employment of the inmates and of the development of their social life. People who lead a useless and monotonous life are bound to be unhappy. It is not enough that the inmates of charitable institutions should merely have their physical wants provided for. They should all be furnished with occupations suitable to their capacity, not only as a means occupying their time but so that they may contribute toward their own support as much as possible. Besides this, they need amusement and recreation and, where possible, they should be given good educational advantages. Outdoor life is preferable where it can be supplied. The limitations of space will not permit me to discuss specific occupations, but the heads of all institutions should be required to give attention to these problems.

The problems of financial management and proper systems of accounting are of great importance. The heads of all departments or agencies engaged in charity work should make frequent reports and these reports should show gains and losses, comparative costs between the various months and years of the institution itself, and between itself and other similar institutions; these comparisons to be based on a standard unit of service. A very full and able discussion of tests of efficiency of this kind may be found in Dr. Wm. H. Allen's book entitled "Efficient Democracy."

Efficient Workers

After all has been said and done to secure proper plans and machinery for doing charity work effectively, the result cannot possibly be achieved through any means unless the people employed to carry on the work have the ability and training to do their work and also have a kindly spirit in their hearts. In order to secure this kind of people the salaries paid to them must be large enough to enable them to maintain a good standard of intelligence and comfort. They must be selected because of their qualifications. Mere con-

siderations of political expediency cannot be given any weight. I believe that a civil service merit system of the right sort is the best agency for securing this class of workers. Such a system would be quite exacting in its standards of admission to the service so that it would be impossible for anybody to get in merely on account of his political connection. The system ought to give the heads of departments or the proper supervising boards great freedom to discharge any employees who are not satisfactory to them. If people should happen to be discharged for political reasons, which of course they ought not to be, there should at least be a guarantee that their successors must be qualified people. I have heard various complaints from heads of departments in different places where civil service rules prevailed, to the effect that it was impossible for them to get rid of dead timber. In Kansas City the civil service rules are quite liberal in granting power to the heads of departments to discharge any employees for any reasonable cause. Some have been discharged from the department with which the writer is connected, for the sole reason that they were inefficient, and no difficulty has been experienced in making the discharge effective. I do not believe that the difficulties which have been pointed out in other places are an essential part of a strict merit system. Those who are accepted as social workers in any city department should not only be required to have some knowledge of social work but they should be required to study continuously, just as public school teachers are required to attend institutes and do a certain amount of continuous study in connection with their work.

Co-ordinating Social Betterment Agencies

The problem of the efficient administration of charity cannot be entirely divorced from the consideration of how the agencies for dealing with the poor are to be related to the machinery for handling the sick and the delinquent. The care of the poor, the sick, and delinquent are interrelated problems. People who are too poor to secure a reasonable standard of living become sick, or people who are sick lose their earning capacity and become poor. People whose resistance is broken down either by poverty or sickness become delinquent, and criminals often become poor through shiftlessness or sick through vice and dissipation. Because of this interrelation it is important that the agencies dealing with all these classes should be carefully

co-ordinated. These classes are also closely related to the problems of bad living and working conditions. They create bad conditions, on one hand, and bad conditions tend to break down normal human beings and throw them into these classes, on the other hand. Therefore, the agencies which are intended to improve bad living and working conditions also need to be closely related to the agencies which deal with the unfortunate classes.

In every large city there are at work charitable agencies, correctional agencies, tenement house commissions or other machinery for improving housing conditions, agencies for dealing with industrial problems, such as a bureau of labor statistics, an employment bureau, and a department of factory inspection. There are other agencies working at the health problems of sanitary inspection, medical inspection of schools, the prevention of infant mortality, the control of contagious diseases and the maintenance of hospitals and dispensaries, etc. There should be added to this category the agencies maintained by the school authorities for preventing truancy and the cure of incorrigibility and backwardness. All these must be woven into one united system. As a first step in this direction, I would suggest the maintenance of a common registry of cases, and a mutual exchange of information. In fact, no registry will be large enough to serve the purpose of all these agencies, excepting a registry of the entire population, such as I have advocated heretofore in this paper. The Boston Associated Charities has developed a very remarkable registration bureau, or "Confidential Exchange," as they prefer to call it, for the use of social betterment agencies. It is quite complete so far as the registration of cases by private agencies is concerned. It also contains the registry of cases from the overseers of the poor and the State Board of Minor Wards, but makes no attempt to record criminal cases, school truants, or a number of the lines of data proposed here. The only public attempt at maintaining a registry of any definite portion of the population, so far as I know, is the attempt in New York City to maintain a continuous registry of the school children, which effort is described in *The Survey*, of February 17, 1912. In order to keep the general registry up to date, it will be necessary to keep some track of the movements of the people. This could be done with some degree of success by requiring reports from real estate and rental agencies and by keeping track of new buildings through the building department, but the population would have to

be checked over periodically in order to make the necessary corrections. But this is nothing more than is being done separately now, by the school census takers, the assessors, the election commissioners and the makers of city directories, so that this plan really involves nothing more than the proper systematizing of agencies already in existence in most cities. I do not believe that any scheme which would seem to restrict the movements of the people, such as requiring them to get permits before moving, would be acceptable in the United States.

I have attempted in this article to give only a general outline of the provisions that seem to me necessary for dealing effectively with the charitable problems which exist in all cities.

EFFICIENCY IN COUNTY GOVERNMENT

BY OTHO GRANDFORD CARTWRIGHT,

Director of Research of the Westchester County Research Bureau.

"It is one thing to know that an evil exists and to denounce it. It is quite another thing to put your finger on the cause of it, and it is still another to devise a remedy."¹ In diagnosing the evils of county government, I shall first put my finger on the causes, then announce, not denounce, the evils, or at any rate some of them, and lastly prescribe remedies which are not altogether my own devices. Therefore, my topics will be, causes of inefficiency, specimens of inefficiency, and methods of efficiency.

Among the chief causes of inefficiency and its resultant extravagance in county government are the following:

1. The continued use of methods and machinery of administration devised long ago for sparsely settled farming communities but now antiquated and inadequate for the needs of greatly advanced and rapidly growing towns, villages and cities. Frequent attempts to prop up these tottering old institutions by special laws have turned them into patchwork.

2. The political choice, for public office, of men untrained in administration and unskilled in interpretation of the law.

3. The tendency of such men to follow precedent rather than statute in the administration of their offices, and consequently to commit unwitting errors and make important omissions.

4. The lack of diligence on the part of the citizen body in letting official representatives know its will in matters of governmental policy, a cause by no means confined to rural communities.

5. Interest excited by public scandal concerning office holders is mainly sensational. Too much such sensation deadens civic pride and blocks genuine improvement.

As a composite result of these and other causes there are found, particularly in the more populous and wealthy counties, complex and confusing masses of legislation, general and special, affecting

¹ Hon. George Sutherland, Congressional Record, July 11, 1911.

the different communities in varying degrees. There are also found:

Inadequate, unsatisfactory and wasteful taxation systems.

Inadequate and antiquated systems of accounting for public funds.

Puzzling and fragmentary methods of reporting public business.

Violations, evasions, misinterpretations, and neglect of the laws, by public officials—many of such irregularities unintentional.

Unnecessary sickness and deaths from preventable diseases.

Hundreds of needless officials in public service at the expense of the taxpayer, reduplicating one another's functions in various ways.

Waste and extravagance in many administrative departments.

Capable officials compelled to interpret very freely or openly to depart from the law, or even to obtain special legislation to enable them to achieve efficient and economic service.

No plan of constructive statesmanship. Instead the motives of official selfishness, home glorification, and private pocket prevail.

In the turbulent days of medieval politics the only force that could preserve order and discipline rebellious states was the church. This had no legal existence at first, but worked up an organization that controlled the world. Politically the New York State counties² and those of other states following the general plan of the middle eastern states in county development, resemble that medieval condition. The only man competent to issue orders to county officers that they shall do thus and so, or, failing to obey, shall be disciplined, and competent to enforce those orders, is that unofficial but most powerful being, the county boss. The officers themselves have little power or influence one over another. There is no central executive in the county, but, instead, a great many practically independent departments, whose functions are somewhat confusingly interlocked by the complex requirements of county, town, municipal, public officers and various other laws, and in the larger counties by many special acts for particular municipalities. Many of these are conflicting and practically impossible to reconcile.

² The discussion in this paper relates in general to counties of this type. In the South, where the Virginia type of counties prevails, the entire governmental structure is different. Many county systems show great advances over the type of counties described here. The writer has most frequently in mind, throughout this article, the New York State system of counties.

There is an official executive head of all the counties in the state, namely, the governor, but his function is not directive; it is disciplinary only, and called into play only for the removal of officers guilty of gross misconduct. The governor appoints a large number of state officials who might be called the state ministry. Each one of these has some general powers over county affairs, and a good deal of direct control over some particular county official. Note the following illustrations:

The state excise commissioner has general supervision of the collection of excise taxes, and direct control over the county's deputy commissioner of excise. He may examine the county treasurer's accounts with reference to the excise fund.

The state board of charities controls the county's care of its paupers and insane and has direct supervision over the county superintendent of the poor.

The state commission of highways may reject or approve plans of the county superintendent of highways and remove him from office. The county superintendent is appointed by the board of supervisors who are elected by the local townships, and the supervisors fix the county superintendent's salary, and direct most of his activities. His responsibility, therefore, is a very much divided one.

The county commissioner of elections is appointed by a board, composed of county judge, surrogate, district attorney, county clerk and sheriff. His salary is controlled by the board of supervisors. His duties are regulated by the election law, and he is responsible to the state board of elections.

The county clerk is elected by the people of the county. He is clerk of the county court and of the supreme court, when in session in his district, and is subordinate officer of the secretary of state, to whom he has to make various reports. He also has to report to other state officers and bureaus concerning various matters of the county business. In Westchester County he receives as large a salary as the county judge, larger than the surrogate, or the district attorney, larger than his superior, the secretary of state, and equal to that of the governor of the state!

The county treasurer stands in a similar position, but is responsible to the state comptroller for the correctness of his accounts, and for statistical information.

In New York State school commissioners no longer exist. School superintendents, whose number varies according to the population of the county, are elected by school directors, of whom the people of each town elect two. These superintendents may be removed by the commissioner of education of the state. The state pays these superintendents a fixed salary, which is moderate. The county may pay an additional sum by vote of the board of supervisors.

In many county systems there is no department of health. It is a strange contradiction that this function of government which, in state and local municipality is invested with the most mandatory powers, is entirely absent from county administration. It is one of the best of arguments for the entire elimination of the county as a needless political unit, and shows the fallacy of the bugaboo cry for "Home Rule." No one objects to orders from the state commissioner of health. No one objects to state supervision of excise, nor to state control of highways, nor to state direction of schools. Why not state collection of taxes, and state care of the poor, state hospitals, state regulation of all major activities?

As a matter of fact, however, there ought to be some sort of central health authority in the larger subdivisions of the state, whether county or assembly district, or what not, because health laws and ordinances are matters that cannot be enforced properly except by a man on the ground. A county officer,³ with authority to compel uniform administration among the local health authorities, is better than a lot of local officers unregulated.

These examples are sufficient to show the labyrinthine meanderings of departmental responsibilities or irresponsibilities.

In the foregoing examples, no mention is made of the many special statutes, or the many special requirements of the general statutes, that complicate and intermingle the functions and responsibilities of the various officers. The mere citation of such acts, without reference to their substance, would fill many pages of this volume.

The undue multiplicity of local officials and the overlapping of their functions may be illustrated by the administration of taxes. The township is the ordinary unit of taxation. If there were no variation from this, the matter would be much simplified. But there are frequently more villages than townships in a county. Some of

³ Some of our states provide for a county commissioner of health.

these lie part in one township and part in another, or perhaps in parts of three townships. Each village levies its own tax. The whole state is divided into school districts, each levying its own tax. Sometimes these overlap both village and town. Superimposed on these three series of districts are special districts for fire protection. Overlapping these are water supply districts, lighting districts, garbage removal districts, and various other kinds of districts. There are township assessors, village assessors and school district assessors. Each set makes, for the purpose of taxation, a separate valuation of the property within his district. The same parcel of land may be assessed at \$3,000 on a township roll, \$5,000 on a village roll, and \$2,500 on a school district roll.

There is a school tax collector for each school district, a village collector for each village, a township collector for each town,⁴ an excise collector for each excise district, ordinarily the whole county, and a water tax collector. The collectors for towns, villages and schools serve for ninety days only, and then the collection is turned over to some other officials, the supervisors, the village treasurer, the county treasurer. Westchester County has two hundred and twelve collectors of taxes. One central receiver and twenty deputies would be much more efficient.

One of the greatest causes of inefficiency is the procedure ordinarily provided by law for the audit of claims against the county. Any office or department may order what supplies and services it needs, or which its head thinks it needs, and the bills are presented to the county board of supervisors for audit. This is a good enough system in a small county where taxpayers are few and are conversant with what the county is doing. But in a more populous and wealthy county, it is impossible either for the taxpayers to follow the details of the county business or for the supervisors themselves to know what bills should be allowed and what rejected. Moreover, there is no advance appropriation for county audits. The bills against the county are never classified and registered as charges against departments. Instead, the bills are allowed to run on for a year, then footed up, and the sum total is raised by tax in the annual budget. The county is always paying last year's bills. The treasurer cannot tell at any time, neither can any auditing committee, the amount of

⁴ Here again some of the western states excel, e.g., Iowa, Michigan, Indiana, etc., have all their taxes collected by the county treasurer—a great simplification of a problem of plain finance.

outstanding encumbrances against the audited bills account. So the account is never closed, but runs on and on, world without end. In counties where there is a county comptroller or auditor this condition is not so bad. Such officer usually has power to govern accounts and audits and can keep a sharp watch. But such counties are few in the East. In many of the western states the county auditor is a regular functionary.

But cannot the public control the allowances of these unclassified and endless claims? No, the public has no more idea what they are for than has the Gaekwar of Baroda. A very general law requires the publication of the list of all these vouchers. They are usually published in the following form:

| Voucher Number. | Claimant. | Purpose. | Amount Claimed. | Amount Allowed. |
|-----------------|--------------|---------------------|-----------------|-----------------|
| 2347 | John Doe, | Services to County, | \$1,000.00 | \$1,000.00 |
| 2348 | Richard Roe, | Supplies, | 672.00 | 672.00 |

Who is John Doe? What services did he perform? At whose order? What is a proper value for such services? Was he overpaid or underpaid? Were the services needed? Could not that \$1,000 have been devoted to supplying a greater need than the above services? The same queries may be made regarding Richard Roe and his supplies. There are no answers to these questions. If the taxpayer follows the list of bills through and tries to determine what his money is being spent for, his ultimate destination will be a padded cell.

The maddening insufficiency of public records is not confined to accounting reports. It is characteristic of nearly all official county and local publications. The taxpayers ordinarily can learn nothing of details of public business of the county. The county budget is passed with all sorts of expenditures hidden under the item "County Audited Bills." It is never submitted to the public for discussion. The making of the ordinary county budget is one of the most unscientific governmental operations in the universe.⁵ About the only course open to the taxpayer seems to be to pay his taxes, whatever they are, and forget it.

⁵ Indiana has a state board of accounts and a county auditor, who enforce an advance itemized estimate, from each officer and department, of the expenses for the ensuing year. Appropriations are based on such estimates.

In many counties the public records, except county clerk's records, are often in wretched condition. The records in some townships are tied up in bundles and piled into boxes. Some of them are mere masses of jumbled papers, covered with dust and mould, kept in barrels or bureau drawers, or under the spare bed, or any convenient place. There are great gaps in the records, in some instances the records of several years at a stretch are missing. Town officials have been found who have burned quantities of records to *get rid of them!* "What's the use o' keepin' bundles of ole papers that come f'm 'way back 'fore the Revolutionary War?"

These features are due to the election of untrained officials. "How are you going to avoid untrained officials in country offices?" We cannot do so. But we can have *the state send trained officials at intervals to teach local officials their duties and to see that such duties are properly executed.*

How can we increase the efficiency and decrease the cost of county and local administration? Perhaps the greatest criticism of the operation of the county government as a whole is that the entire administration has no plan, never did have a plan, and apparently never will, until the citizens demand it. By plan, I do not mean the schemes and plots of the political bosses, nor the intrigues of the politicians, nor the individual proposals by good citizens for specific improvements. The boss has a plan. It is to have at his disposal and control as many big salaried jobs as possible to hold his lieutenants in line, and as much official advertising as possible to give to the newspapers an incentive to be friendly. His agents in the board of supervisors work with that plan in view. The taxpayer is held in contempt, and his protests are unheeded. He has nothing to do with the conduct of office, forsooth. Let him pay his taxes and shut up. Such is democracy in American county government.

Individuals and groups put forward plans in generous numbers for particular improvements, but there is no consistent plan for the whole administration. All is ragged and every interest pulls in a special direction. It is characteristic to select the one or two things whose advocates are the strongest, and devote the county's energies and funds to those and neglect other things.

A proper plan would be developed by first examining minutely into the communities' needs, making a complete list of those needs in

the order of their apparent importance, then studying them carefully, counting the cost, and spreading the budget allowances evenly over the whole.

In some states, e. g., Massachusetts and Ohio, there are systems closely akin to a commission form of government for the county. In these states the efficiency of county administration is much more marked than in counties where the New York system prevails. Undoubtedly the greatest efficiency and economy would be brought about by centralizing the government of the county in the hands of a board of not more than five elected commissioners, the abolition of the county board of supervisors, and the appointment, by the commissioners, of all subordinate officers, upon a basis of capacity. The commission should have power, under proper regulation, to remove from public office for incompetency any of their employees. The commissioners themselves should be controlled by electoral recall.

It is not necessary to describe here the commission form of government with the short ballot. It is too well known. Its applicability to counties is perfect. The strongly fortified political party system with the boss at the head stands in its way. It would put the boss out of business. Therefore, he will usually oppose it. When it is proposed, he sets up the cry "Revolution," "Treasonable attack on the institution of our forefathers," "Patriotism overthrown;" and such outcries seem effective.

I do not believe in tearing down old institutions merely because they are old. Much less do I believe in propping up tottering old governmental machinery by awkward, cumbersome and complex devices that are wasteful and inefficient. I believe rather in building new and strong institutions, adequate to the growth and exigencies of the present, with provision for future expansion, before there is a general collapse of the old.

Without the revolutionary measures that might be necessary to establish commission government in counties, without introducing new political theories, is there a way to bring about efficiency and economy in county administration under present laws? The answer is ready. *Prepare a plan for the existing system*, whatever that system may be.

Since the whole plan of an administration depends upon budgetary control, the most direct method of arriving at a wisely constructed plan is to design and operate a wisely constructed budget. The

experience of the New York Bureau of Municipal Research in this respect seems to furnish most valuable guidance to such an end. The following outline of method is compiled largely from the work of that Bureau.⁶ It is adaptable to any tax levying and tax spending community, from a school district to a state entire. It seems particularly to meet the needs of the county.

PLAN TO SECURE EFFICIENT MANAGEMENT BY SCIENTIFIC BUDGET MAKING.

I. THE BUDGET A BASIS FOR EFFICIENCY.

- (I) Neglect of budget making prevalent in nearly all American municipalities.
 - 1. Citizen does not know.
 - 2. Citizen purposely kept in dark by politicians.
 - 3. Citizen does not care until taxes become due—then it is too late.
- (II) Importance of properly constructed budget.
 - 1. Education in citizenship.
 - (1) In community needs.
 - (2) In government efforts to meet them.
 - 2. Promotes understanding of public service, and therefore
 - 3. Promotes *efficient* public service, because people *know*.
 - 4. Tells whether you get what you pay for.

II. IMPORTANCE OF PUBLICITY.

- (I) Publication of full details of public business absolutely necessary.
 - 1. Public plans, showing all contemplated operations and achievements of every department.
 - 2. Public records, showing
 - (1) Exact conditions of public funds at any time.
 - (2) Exact detailed cost of any department or function of government.
- (II) The two sorts of publicity usually supplied (neither is satisfactory).
 - 1. That originating with private citizens and newspapers.
 - (1) Built on scraps of information, and therefore
 - a. Omitting important elements, or
 - b. Wholly misrepresenting policy.
 - (2) Often giving undue praise or blame.
 - (3) Often scandalous attack on personalities.
 - (4) Not always enlightening or creating healthy interest in civic betterment.
 - 2. That furnished by official reports.
 - (1) Often doctored to cover faults.

⁶"Making of a Municipal Budget," Bureau of Municipal Research, New York City.

- (2) Usually incomplete and confusing, leaving the citizen helpless.
 - e. g., The ordinary reports of a municipal treasurer.
 - No statement of assets and liabilities.
 - No cost accounting.
 - Each fund account full of transfers.
 - Impossible frequently to tell even the net receipts and disbursements of a fiscal accounting period.

III. ESSENTIAL PRINCIPLES OF BUDGET-MAKING.

- (I) Obtain knowledge of community needs.
 - 1. Study community government.
 - (1) How many separate departments?
 - (2) Functions or lines of activity of each.
 - a. What is each trying to do?
 - b. What purposes has it in view?
 - c. What services does it require?
 - (a) Men employed.
 - (b) Compensation.
 - d. Are they necessary for community progress?
 - 2. Learn what community needs the government does not meet.
- (II) Cost of supplying such needs.
 - 1. Study public records, original bills, etc., to learn
 - (1) What services community actually gets.
 - (2) What it should justly pay therefor.
 - (3) Total cost of each line of service as rendered.
 - 2. Learn what an enterprising private business would pay for similar services.
 - 3. Estimate what unfilled needs would cost.
 - 4. Publish clear statement of the results of such study.
 - (1) Cost reports.
 - (2) Graphic charts and representations.
 - (3) Comparison of cost of each detail for several years.
 - 5. Determine units of service and of pay.
 - (Compare present hodge-podge of county salaries.)
 - 6. Determine standards of cost for supplies.
- (III) Appropriations to be functionally segregated.
 - 1. A specific fund for each department.
 - 2. A specific apportionment of such fund for each detail of that department.
- (IV) Install departmental and functional cost and fund accounting, with
 - 1. Central accounting control.
 - 2. Prohibition of transfers without specific authority.
 - 3. Supporting systems of vouchers definitely locating responsibilities.
- (V) Provide accurate records of service, improvements and supplies, obtained for the expenditure of public funds.

- (VI) Prepare a budget exhibit showing the entire plan of the administration.
- (VII) Open the budget to public discussion before passing it.

This outline is, of course, difficult for individual citizens to put into effect. But a public welfare committee of such citizens, or any live civic organization or club may bring it about. Any citizen has the right to examine all public records. The results of such examinations must determine the course to be pursued.

Efficiency in county government is quite possible. But a community of the holiest of men cannot count upon it, unless they set about obtaining it. Any community of average citizens can get it, if they will.

A PROPOSED MUNICIPAL ADMINISTRATIVE CODE FOR NEW JERSEY CITIES

BY D. O. DECKER,
New York Bureau of Municipal Research.

A municipal administrative code is conceived of as a document of legislative enactment providing the procedure which must be followed by city officers and employees in the exercise of their public functions. It would express in writing such minimum standards of operative efficiency as a business man would require in his private business. It would deal, not with the selection or election of the officials who are to perform the duties, but with the methods they shall employ in discharging them.

Such a code should be a separate document from the charter. It should present an orderly arrangement of all the procedure now contained in the city charter, together with such procedure found in the ordinances as is of a permanent character. Being intermediary between the charter and ordinances, it would be more subject to change than the charter, and less subject to change than city ordinances. The latter should contain only matters subject to frequent change, such as police regulations, license fees, etc. This elimination of procedure from the charter will lessen the necessity of charter amendment and permit that document to attain a permanency which will secure for it a proper measure of dignity and stability.

The code should be a complete manual of the procedure to be followed by each city official in administering the functions assigned to him by the charter or by other legislative acts. It should provide the procedure to be followed in the formulation of the budget, purchasing of supplies, letting of contracts, regulation of city advertising, construction of public improvements, issuance of bonds or corporate stock, establishing of sinking funds, recording and reporting of municipal transactions, issuance of warrants and all other matters of business procedure. A code might be so drawn that it automatically insures constructive city planning before expenditures are authorized.

One of its fundamental purposes should be to make available facts from which city officials may determine upon their program for each fiscal year.

Necessity for an Administrative Code

No American city has to-day, in one document, a complete codification of its administrative procedure and methods. To ascertain the procedure which should be followed in performing many administrative acts, it is necessary to search the general laws of the state, the city charter and the local ordinances. Not only does this tend to uncertainty among city officials as to what may be required of them, but it seriously handicaps the public in its dealings with the city. In contemplation of law, the private citizen is presumed to know the exact limitations of the authority of those who represent the city in its contractual relations. If these city officials assume authority not given by law, he deals with them at his peril.

A code, if only codifying existing requirements of procedure, would well justify its enactment. When properly drafted, it should go further and include matters of business procedure which are not usually found either in general laws, charters or ordinances, but are left to be settled according to the discretion of the official who happens to be in power.

To better illustrate how essential requirements of procedure and methods may be, a comparison of the experiences of two cities, each governed by commission, and each facing similar problems of community need, will be of interest. The commissioners of both cities are intelligent men and desirous of proving efficient administrators. The success of commission government in the one city has been so marked that the city is pointed to as proof of the merits of this form of government. Commission government in the other city may at best be termed only moderately successful. In the first city, both the program and routine of administration are based on known conditions of finance and on the story told by detailed records of expenses. In the other city, administrative action proceeds, not upon known facts, but upon an optimistic hope that the program and methods adopted may prove beneficial. An unnecessary expenditure in the first city may be at once ascertained from an examination of the accounts and records. In the second city, only by detailed analysis of expenditures in every instance, can a commissioner ascertain the significant facts even in his own department. The reason for this difference in the administration of the two cities will be found in the fact that three years before the first city adopted commission government it installed a most excellent system of municipal accounts.

This system has become a part of the city administration. It affords information from which adequate plans for both present and future needs can be formulated.

We are justified, then, in assuming that no community can provide for efficient and economical local government until it has provided for the installation of an adequate system of municipal accounts through an administrative code or by similar legislative enactment. The installation of proper accounting methods, while it gives a basis for efficiency tests and business methods, does not insure their adoption. The administrative code should meet this need and require the adoption of such business methods and efficiency tests as practical experience has shown to be necessary. For example, a city purchasing supplies through a central purchasing agency will probably obtain a lower unit cost on supplies than is possible where each department purchases for itself. The code should require all purchasing to be made through one bureau under prescribed business methods.

A comparative analysis of the procedure obtaining in various cities, discloses the fact that there is but little uniformity in municipal administrative methods. A similar analysis of the methods employed by large private corporations shows a decided similarity of methods employed and a positive uniformity in the fundamental principles of procedure.

Practicability of a Code

No adequate reason has ever been advanced why the business methods of a municipality cannot be made equally as efficient as the methods used in private enterprises. The success of business methods, when adopted, has been marked. By standardizing specifications for the purchase of supplies, the general practice among large business corporations, the City of New York has saved in one year a half million dollars. The problem of formulating an administrative code resolves itself into the feasibility of drafting a code of methods and procedure which will establish these uniform standards of business efficiency in municipal administration. Many laws of mandatory nature have signally failed in their attempts to legislate public officials into either honesty or efficiency. But the failure is often attributable to definite faults in the drafting of the laws. To be successful, mandatory laws of this character should be constructive

in nature rather than restrictive. The administrative code should prescribe only those methods which have a tried and known value, and should be limited to requiring only the essentials of efficient administration.

Though there may be good methods and bad methods of transacting the business of a municipality, there is also a best method. The best method for one city is usually the best method for others and it is for this reason that such a code may apply to all the municipalities within a state. In fact, a code of state-wide application has inherent advantages. It enables the public to be better acquainted with municipal procedure because of the certainty that the methods and requirements in effect in one city will be those in effect in all cities in the state. If a doubtful point is construed by the courts, the one decision clears that point of procedure for the entire state. Furthermore, it encourages outside bidding on city contracts, and gives added security in passing on the legality of bond issues.

Preparation of a Code

The drafting of a code cannot wisely be attempted until a careful study is made, not only of existing needs, but of existing legislation. It is essential to examine first the state constitution, the general laws and the city charter and ordinances. The constitution and court decisions construing it must be examined to determine the constitutionality of each proposed code provision. For example, a code to be constitutional must provide for proper notice to property owners before any steps may be taken which subject their property to special assessments or liens. By constitutional provision in most states, no property can be taken under the right of eminent domain, unless it is to be used exclusively for public purposes. This prevents code provisions for the condemnation of more property than the city may require for immediate needs, although it may be highly desirable that the city by such a purchase may avail itself of increased valuations due to public improvements, to better transit or to the construction of civic centers.

Three reasons suggest themselves for the necessity of a careful analysis of the general laws of the state and the city charter and ordinances before drafting an administrative code. First: So far as is possible, existing procedure should be re-enacted in the code. This will cause less confusion in following out the code provisions

and make the code more acceptable to the municipalities which will be governed by it. Second: Language which has been construed by the courts has a definite advantage over new phraseology. Such language should be used wherever feasible, as it insures the proper interpretation of the new enactment. Third: Existing forms of local governmental organization must be considered, that the code may provide procedure which will be in harmony with the organization of the city government, its various departments and offices.

If a repealing clause is added to the code, the schedule of laws repealed must be most carefully drawn, that it may leave in force all non-conflicting laws, but insure the repeal of all laws which might permit a choice of procedure, where such is undesirable. As has been suggested, much of the procedure of the code must be drawn from business and administrative experience. Very few satisfactory precedents for this will be found in legislative enactment, and in formulating such provisions the draftsman must begin *ab initio*.

Subjects Properly Regulated by a Code

It may be well to consider a few subjects of municipal administration which may properly be regulated by an administrative code.

(2) *Budget Making*.—The procedure for the proper formulation of a municipal budget is a matter of the greatest importance and is one that should be made definite. These provisions should include public hearings on a tentative budget based upon examination of detailed and classified requests from each department and office. The budget in its final form should be required to show the allowances grouped by specific functions. The appropriation for each department or office should be placed under the proper function and these appropriations again sub-divided as to the object of expenditure. The last classification, for example, will show separately the appropriations made for personal services, supplies repairs, replacements, etc. By summarizing the appropriations throughout the budget for any one of these classifications, the total allowance made for any kind of service or expense can be accurately obtained. A comparison of appropriations and results for a year with those of prior years, is of great interest to the taxpayer and necessary to scientific budget study.

(b) *Public Improvement Authorizations*.—It is entirely practical to require that a program for city improvements be formulated.

This program should include, not only the improvements for the ensuing year, but also a tentative program for succeeding years. It is also feasible and desirable to have provisions requiring that all sewers, water mains and service conduits shall be laid in a street before the paving is begun. Too often we witness the sorry spectacle of tearing up a sound and serviceable sewer, because newly constructed laterals have thrust upon it more sewerage than it was designed to carry. This may be eliminated by forbidding the construction of any sewer until a plan has been approved for a complete and adequate system draining the entire sewerage area.

(c) *Purchases*.—Both cities and private corporations depend upon competition to reduce their contractual expenditures to a minimum cost. But while this method employed by private concerns has been generally successful, employed by the city it has too often stultified itself. The key to successful competition is an absolute certainty among the bidders as to what they will be required to do and under what conditions it must be done. It is idle to provide an elaborate procedure in advertising for bids and fail to provide for specifications which permit bonafide competition. By standardizing specifications, forms of contracts and conditions for bidding, reductions of from ten to fifty per cent may be obtained in cost. Such standardizing is a proper requirement for the code. It will mean that coal will be bought for the heat it will give, not the clinkers it produces. If the city be of sufficient size, a testing laboratory as an adjunct to a purchasing department will make possible the purchase of many supplies on a basis of analysis, which otherwise must be bought on appearance and reputation.

Not only should the supplies be bought under standardized specifications, but they should be purchased through a central purchasing agency. Supplies not for immediate use should be retained in a central storehouse, and given out only upon a requisition from the department requiring them. The audit of claims against the city may be regulated by provisions of the code that insure inspection of supplies, while the supplies are still in existence. By making all contracts absolutely illegal which are not entered into as provided in the code, the merchant dealing with the city hesitates to attempt any short cuts or bids for favoritism which may leave him without recourse when his bill comes to audit.

(d) *Specific Application of Revenues*.—It is common to-day to

find that, by special legislation, certain revenues are pledged to certain kinds of administrative activity, without regard to the needs of the particular activity. Often the revenue from excise licenses is pledged to the support of the police department. This may be changed by the code, and city finances put on a sound basis by requiring that all income, with a few minor exceptions such as the payment of certain penalties to pension funds, shall go directly to the general fund, and from there be apportioned by the budget according to the needs of the city for the current year.

(e) *The Fee System*.—The code should abolish the fee system, which is a form of lottery for all concerned, and permit the substitution of adequate salaries in its place. Going one step further, it may require standardization of salaries throughout the city, according to the nature and measure of service rendered. This provision is a step in advance of even civil service, for civil service laws only relate to appointment and removal, and do not reach the abuses which have grown up through unequal salary fixation.

(f) *Hours of Service*.—Office hours of city employees are notoriously short, and, short as they are, there is usually no certainty that they will be observed. Minimum requirements of the time that each employee must devote daily to his official duties are advisable. To ensure the observance of these provisions, time sheets may be required. These time records are also essential to any system of cost accounting, which to-day should be a part of municipal bookkeeping.

(g) *Account Keeping*.—Admittedly, some difficulty may be experienced in making mandatory the installation of any definite procedure in accounting. To attempt to prescribe the various accounts that must be kept in each city department, and in every instance to give the details with which each transaction must be recorded, would make the code a treatise on municipal accounts, rather than a handbook of procedure. But up-to-date and efficient methods in accounting may be assured by other means. Definite requirements may be made as to what must be shown, where it must be shown, and in whom the control shall be vested. By requiring certain general records to be kept, and prescribing definite facts which they must show, the code can assure the city of an adequate and practical system of books and records. No system of book-keeping that does not come up to that standard would be able to meet the general requirements laid down by the code. By giving some

official the power and making it his duty to prescribe the form and details of the accounting methods of the city, the code may further insure the installation and operation of a system which will meet all the needs of the city. If the code is to be of state-wide application, a state bureau of municipal accounts would be recommended with jurisdiction over all the municipalities which are governed by the code. This state bureau might also be empowered to prescribe forms of standard specifications and standard forms of contracts.

(h) *Sinking Fund*.—Sinking fund requirements are a most important subject for regulation. The code should specify the methods to be followed in computing the annual installments to be included in the budget and should also provide for their investment.

A Code for New Jersey Cities

No code, drafted along the lines suggested in this article, is at present in effect. A code for New York City planned on somewhat similar lines was proposed by the Ivins Charter Commission in 1909. This code, while tentatively completed and submitted to the legislature, was never adopted, nor was the charter adopted which it was drafted to accompany.

Municipal conditions in New Jersey have caused a widespread dissatisfaction with existing city charters. Most of these charters have been in effect from forty to sixty years. By numerous amendments, usually made by laws of state wide application, their present interpretation has become uncertain. In many cases the form of organization prescribed by them is unsatisfactory. Even some charters of later enactment signally fail to meet community needs, and one mayor, whose city is governed by a recently enacted "model charter," advised all cities considering new charters to study carefully their charter first—so they might know what to avoid.

Recognizing the necessity of some concerted effort to improve these conditions, a conference of mayors of the New Jersey cities was recently called by Mayor Cooke, of Hoboken. The meeting was held under the auspices of the Robert L. Stevens Fund for Municipal Research in Hoboken, and was primarily for the purpose of considering the formulation of general laws providing up-to-date charters for use in the New Jersey cities. After a general discussion, it became evident that, great as was the need for charter revision, the need was still greater for a revision of municipal procedure. Business

methods were being neglected and city business was being transacted along lines which long since had been discarded by business men.

As a result of the conference, Governor Wilson appointed a committee of seven mayors and other city officials to consider and report upon a municipal administrative code for New Jersey cities. The Robert L. Stevens Fund was requested to prepare and to present to the committee a tentative draft of a code formulated along lines suggested at the conference. This effort is notably significant as an indication of a definite advance in municipal thought in New Jersey, and its results will be of more than local interest. It marks a distinct step toward a more efficient municipal administration, one which will be governed by rational business principles.

EFFICIENT SUPERVISION OF WEIGHTS AND MEASURES

BY FRITZ REICHMANN, PH.D.,

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In the exchange or barter of trade there is always, either expressed or implied, some more or less definite element of specification as to quality and quantity. The more readily controlled and, in many respects, the more important element is the one of quantity because it is largely a matter of fact, whereas the element of quality is very often a matter of opinion. Even the quality element, taking into consideration its nutritive value, very often is a matter of appearance. The determination of the quantity element is the subject of weights and measures.

Immediately where there has begun trading between the people or a commercial intercourse, however simple, there must necessarily arise the establishment of certain definite standards for comparison in order to have intelligent, equitable dealing. As soon as this trading becomes more complex among the people of one tribe, or of a state or of a nation, or as the commerce increases among the people or among the nations, there arises the necessity of enforcement of the use of certain definite standards for comparison of quantity and regulations for the ordinary, everyday business dealings of one man with another, in order to protect the consumer as well as the dealer. Every civilized nation has taken steps or established statutes in an attempt to insure the correctness of the weighing and measuring devices on the assumption that, if such devices were correct, then the quantities measured by them would be correct. Such an assumption neglects the failings of some human beings in wishing to take advantage of their fellows. Consequently it has been found necessary to take the next evident step, namely, insuring that the devices were properly used after they were correct. It may be remarked in passing that, where commodities are sold in bulk and from bulk, when weighed and measured from correct weighing and measuring devices, ninety-five per cent of such quantities delivered are correct. The matter of weights and measures resolves itself into two main divisions, first, the instrumental side, and secondly, the securing of

proper use of correct instruments. Of these the latter is by far the more important inasmuch as, expressed or implied, the weight or measure enters into every commodity dealt with in the ordinary transactions of trade. It is, therefore, highly important to insure by law equity, fairness and honesty in such dealings and thus to protect the quantity delivered.

A necessary department in every municipality is one that has supervision of the weighing and measuring devices used in trade. This includes the weights, scales, liquid and dry measures, water meters, gas meters and electric meters. Such department shall be held responsible for the correctness of such weighing and measuring devices and should hold the owners or users thereof responsible for their correct use. Such functions of the department, when properly and fearlessly exercised, would be of direct benefit to the municipality in checking the quantity, and very probably the quality, of the commodities delivered to the various departments or institutions supported by the municipality; these would include, of course, feed, coal, hardware, dry goods and other supplies. Secondly, its functions would be of direct benefit to the dealers, both wholesale and retail, in protecting the honest and legitimate dealer against the inroads of those who sell in indefinite terms and who are the only competitors which the honest dealers cannot conscientiously meet. Thirdly, these functions would be of primary importance to the consumers because they would be directly benefited in their daily purchases of the necessities of life. The consumers would have the further stimulating and moral effect of being educated in purchasing in a definite manner, which is the first element of economy. No single legitimate function of the municipal administration enters so directly into the everyday life of the citizens.

The organization of such a department should be simple. As an illustration may be taken a city of about one hundred thousand inhabitants. There should be an executive head or commissioner, who should have a clerk and stenographer, four assistant commissioners or chiefs of divisions, namely, chief of electric meters, chief of water meters, chief of gas meters, and chief of weights, scales and measures. Under each of these chiefs should be two inspectors, although the chief of scales, weights and measures should probably have four. Two vehicles would answer the whole department. In many cities the electric meters, gas meters, and water meters

ordinarily come under the jurisdiction of separate departments, there being a somewhat erroneous idea prevailing that, from a standpoint of financial control, they should come under these other departments. But, economically, all functions of testing should more properly come under a testing department such as the one here considered. The commissioner of weights and measures should have an office and a laboratory or mechanical division equipped with the proper standards for making the comparison with commercial apparatus. The expense of such an equipment would depend somewhat upon the particular kind of manufacturing industries prevailing in the municipality. The cost of laboratory equipment and working standards, including the inspectional kits carried by the inspectors, would probably not, at first cost, exceed \$4,000, divided about equally among the four subdivisions of the department.

The administration of the department is materially simplified if, in inspecting the various kinds of apparatus under its jurisdiction, definite specifications for apparatus are issued and these regulations adhered to by the department. The department should establish a firm policy of tolerances and variations on commodities delivered or ready to be delivered to the consumers or to the municipality. No apparatus should be allowed to be installed or used for the purpose of measurement of any kind which has not first been inspected, tested and approved by the department. This is very essential as it stops the launching of false apparatus. The head of the department in his regulations should confer and co-operate with the head of the state department, if there be such, in order that there may be uniformity in methods of administration in the various municipalities.

A very important function of the administration of the department is the prosecution of violations of the laws relating to the correctness of the weighing and measuring devices and the manner of sale of commodities. Where such law is by ordinance it would be advisable for the head of the department to confer with the similar state department relative to the form of such ordinances in order that there may be uniformity in the ordinances. Such is the case in the State of New York where practically all the ordinances relating to weights and measures follow one uniform type.

The department should, in its educational function, give occasional exhibits to show the people what has been done and to educate the consumers how best to protect themselves. Such occa-

sions frequently arise in talks to church clubs, schools, food fairs, association meetings, etc.

A municipal ordinance relating to weights and measures should establish, first, a department, together with a provision for the salaries of the regular employees of the department and a provision that the expenses be paid in the regular way in which such expenses are paid by the particular municipality. The ordinance should prescribe that no weighing or measuring device can be used until it has been inspected, tested and sealed by the department of weights and measures; and, where particular classes are licensed, such as peddlers, their license should be granted only on condition that the apparatus used by them has been tested and sealed. The duties, outlined in the ordinance, should be broad enough not to hamper the department by picayune technicalities, which, of course, will often arise in the prosecution of violators. The following wording of the ordinance is suggested:

The commissioner of weights and measures shall have a general supervision of the weighing and measuring devices in the city and in use in the city. He shall take charge of, and safely keep, the primary and working standards of the city. He shall have the power within the city to inspect, test, try and ascertain if they are correct all weighing and measuring devices and instruments of every kind and any mechanical device for measurement and the tools, appliances or accessories connected therewith that are used or are employed within the city by any proprietor, agent, lessee or employee in determining the size, quantity, extent, area of quantities, things, produce, articles for distribution or consumption or use, or offered or submitted by such person or persons for sale, for hire or award. He may, for the purpose of making a proper inspection and test and the general performance of his duties, enter or go into or upon, and without form of warrant, any stand, place, building or premises, may stop any peddler, vender, coal dealer, junk dealer, ice wagon, or any dealer whatsoever, for the purpose of making any proper test. Whenever he finds a violation of the laws relating to weights and measures, he shall cause the violator to be prosecuted.

Such a provision is broad enough to cover all kinds of weighing and measuring devices, including not only those used for the sale of commodities, but those used for the purpose of estimating the compensation of employees, as is done in a great many manufacturing institutions. The ordinance should prescribe a penalty for the possession of a false weighing or measuring device and an increased penalty for second and subsequent violations. The ordinance should prescribe that all commodities, sold within the city, shall be sold by

standard weight or standard measure, provided, however, that such commodities which appear as a unit in the state of nature may be sold by numerical count. The department should establish tares and tolerances and maximum variations, which are allowable.

The shortcoming of most laws and ordinances is that they go into unnecessary and minute details, which should be a matter of regulation and administration. Where regulations are issued, such regulations would be required to be made in printed form and advertised for a period of sixty days before they go into effect.

The efficiency of a weights and measures administration will be highest when the administration will insist on four things: (1) The elimination of the launching of false apparatus or apparatus which, from its construction, is such as to facilitate the perpetration of fraud or is not such as to be conducive of proper service; (2) always a firm and impartial weighing of evidence in cases of violation, as to whether an element of deceit or fraud is involved; (3) taking into conference the business interests and business men of the municipality, thereby obtaining their co-operation in eliminating the evils of short or false weighing and measuring, whether intentional or accidental; and (4) a full, lucid report on work which has been done by the weights and measures department.

In conclusion, an efficient inspectional system of the weighing and measuring devices which enter into our everyday life, and every hour of every day, and whose accuracy affects directly the cost of such commodities is a necessary and welcome function of every municipality. This has long been recognized by all civilized nations and municipalities, with the exception of a great number of municipalities of the United States, due largely to the lack of appreciation of the subject by the federal and state governments of the United States.

SECURING EFFICIENT ADMINISTRATION UNDER THE COMMISSION PLAN

BY FREDERICK W. DONNELLY,
Mayor of Trenton, N. J.

The most interesting innovation in the field of municipal politics in the past decade has been the development of commission government, so termed because the governmental policies are entrusted to a board or commission. It had its inception in the City of Galveston after the disastrous flood of 1900 had completely devastated that city. The remarkable progress that was wrought in rehabilitating Galveston under its new charter made that city the cynosure of national attention. This condition, augmented by the general dissatisfaction that emanated from many quarters where the old system of municipal government had become inadequate, caused other Texas cities to hold referendum elections for the purpose of adopting the new and modern plan. In every instance civic awakening followed in the wake of the new charter, and commission government was heralded as a panacea for long existing municipal evils. Other western and southern cities, including Des Moines, Iowa, soon followed the example of Galveston and the change of charter was attended by some amazing and highly meritorious results. The agitation for a more modern system of government gradually spread to the East. One of the first cities to give serious consideration to the proposition was Trenton, where the subject was first considered at least two years before the campaign for its adoption was commenced.

One of the most satisfying proofs of the efficiency and superiority of government by commission is the dearth of criticism that has been directed at the plan in municipalities where it has been adopted. Of course, there are many who are antagonistic to the features embodied in the commission government law and much opposition has been manifested in the various campaigns that have been conducted for its adoption, but, nevertheless, this opposition generally sinks into oblivion after a short period of practical commission rule. The statement has been made, and I believe by veracious authority, that not a single municipality, either east or west, that has voted to super-

sede the old aldermanic system by the commission plan has returned to its former charter. Truly this is an astounding condition which proves conclusively that commission government is not the outcome of theoretical fanaticism.

Another proof of the universal satisfaction that commission government is giving lies in the fact that between January 1, 1906, and February 1, 1912, one hundred and eighty-six American cities, representing thirty-three states, voted in favor of adopting its provisions. These cities are typical American cities, ranging in size from the fourth class municipality of four or five thousand to cities of one hundred and fifty thousand population. Hundreds of other municipalities are considering the advisability of abandoning the old system and replacing it by government by commission.

Considering the fact that government by commission, as a governmental institution, is still in its infancy, being a product of the last dozen years, the vast number of cities that are now operating under its provisions augurs well for the future success of the system.

Although the various commission government laws that are in operation throughout the country differ in some minor details, they are all essentially the same in one respect; that is, they result in the substitution of modern and practical business methods for political prestige in the official conduct of municipal affairs.

To my mind, the long-felt want that the new plan has supplied lies in the modernization of its charter provisions. Conditions that were predominant fifty years ago are unimportant factors in municipal affairs to-day; the plan of operation that was successfully effectual half a century ago can no longer grapple with present day problems. Cities that do not keep apace with the advancement of time, instead of progressing, will find themselves retrogressing. A municipal corporation, the same as a business corporation, must live in the atmosphere of the present day if it desires to take its place among the foremost American cities. Commission government, to an immeasurable extent, met with immediate success because it embodies the modern features that are lacking in the charters of many of our cities.

The important characteristics of the commission plan as it has been adopted in American cities, are: (1) the placing of the municipal governing authority in a small body of men; (2) their election at large, instead of by wards; (3) the power to exercise administra-

tive and legislative functions and the privilege of appointment by the board; (4) the placing of each commissioner in charge of a definite department and making him responsible to the people for its proper and intelligent management; (5) the power given to the people to secure honest and efficient government through the medium of the initiative, referendum and the recall. The intrinsic value of commission government really rests on these cardinal principles.

The first characteristic feature of government by commission is the placing of governmental authority in a small body of men. Under the councilmanic plan it was literally impossible to secure concentration of power and responsibility because of the vast army of men who were directly interested in legislating for a city's wants. A body of twenty-five or thirty men is too unwieldy and cumbersome for the expeditious transaction of business. Petty differences will arise concerning matters of trivial interest to certain localities which will require the time and attention of the whole body, notwithstanding that the subject under discussion is of relatively no importance to the community. Unanimity of opinion, which is so essentially necessary in municipal affairs, is rarely, if ever, found to exist in large legislative bodies, because a representative, instead of devoting his efforts to problems whose solution will be of permanent benefit to the entire community, usually becomes actively interested in only those things which pertain directly to his constituents. Then again, it is extremely difficult to place responsibility on individuals under the councilmanic form of government. Instead of each councilman having unlimited supervision over certain departments as in the case of a commissioner, the governing body, as a whole, outlines the course of procedure and the general management of every department; consequently any errors of judgment or dishonesty of action reflect discredit on the entire council and precludes the possibility of singling out the guilty individual. One of the greatest assets connected with the small board proposition is that it allows the electorate to have full knowledge of the men who aspire to serve them. When there are innumerable elective offices to be filled, it frequently results, unfortunately, in a great array of candidates entering the field, which means that the public cannot give the prospective officials the attention their candidacies should have. Consequently, it is easily conceivable that sometimes men totally unqualified slip into office. Inevitably an administration of destruction rather than of construc-

tion follows. Under the short ballot plan it is highly improbable that such a condition should exist. Voters have a better opportunity of measuring the merits of the candidates when but few offices are to be filled. Citizens have a better opportunity of studying the commissioners after they are in office, as their every act is open to the closest scrutiny.

The abolition of ward elections is the second characteristic of government by commission. This gives every citizen a chance to vote for the candidates who, in his judgment, are best fitted to fill the commissionerships, regardless of the section of the city in which they reside. Thus the commissioner is the representative of all the people and as such is free from the petty ward obligations that are shouldered by the councilman. The commissioner, having been elected to office on a blanket ballot on which no party labels or designations appeared, is left free to administer his office without being embarrassed by partisan influences. Governmental bodies consisting of ward representatives are frequently disrupted through the petty jealousies that are manifested when one section of the city appears to receive more prompt attention than a rival district. Such small and unmeaning differences are not apparent in a body whose members have been the popular choice of a great majority of the citizens. Commissioners when elected at large are responsible to the entire city and consequently act for the entire city and their every act is prompted by this knowledge. In the majority of cases they devote their time entirely to their official positions and become trained experts in municipal management. It is a sensible conclusion that men who are in constant touch with the prevailing conditions in a municipality prove better officials, possessing increased competency and efficiency over men whose attention to governmental problems is only given at periodical intervals.

The third peculiarly essential feature of commission government is the concentration and centralization of the authority that was formerly vested in the mayor, the members of the common council, the various administrative boards, and the heads of departments. The governing body, in commission cities, might properly be termed the working unit of the municipal government, for, although the commissioners may assign a certain element of their power to subordinate officials, they are, at all stages, complete masters of the situation. The legislative privilege enjoyed by common councils is also pos-

sessed by the commission, but to a greater extent. Ordinances passed under the old system of government were subject to the approval or disapproval of the mayor before they became recognized enactments. It cannot be denied that this veto power has sometimes been shamefully abused for political purposes; especially is this true when a majority of the members of the board of aldermen or the council hold political beliefs opposite to the views entertained by the mayor. Friction and political animosity existing between the governing body and the chief executive of a city have, time and again, been the cause of preventing the enactment of laws that would have proved to be of everlasting benefit to the future welfare of the city. Commission governed cities, however, are fortunately safe from the wiles and treachery of political tricksters, because under their system politics has been supplanted by business and personal ambitions have been overshadowed by desire for efficiency and capability. When the commission decides affirmatively on a measure its action is final and supreme so far as the enforcement of the law is concerned. Of course, the commissioners are at all times subject to the will of the people through the initiative and referendum and are consequently prohibited from abusing, to a considerable extent, the vast power they possess. As the enforcement of the laws, after their adoption, is also in the hands of the commissioners, they possess unlimited administrative functions as well as legislative authority. They have the power to appoint the subordinates who, under their supervision, carry out their mandates. They make appropriations and subsequently watch over the expenditure of the money appropriated. The compilation of the yearly budget also comes under their absolute control. In short, they possess the powers of legislation, administration and appointment.

The next essential characteristic of commission government is the placing of a commissioner in absolute control of a distinct department. Thus the commissioners are both collectively and individually responsible for the honest and efficient conduct of their duties. Under the New Jersey statute, the executive, administrative and legislative authority in cities electing five commissioners is divided into five separate departments, as follows: Department of Public Affairs, Department of Revenue and Finance, Department of Public Safety, Department of Streets and Public Improvements, and Department of Parks and Public Property. A commissioner, on being

assigned to any one of these departments, has absolute control and is also individually responsible to his fellow commissioners and the people generally for the actions of himself and his subordinates. The mayor, who is Director of Public Affairs, is a sort of advisory director to each of the other commissioners. The commission meets immediately after election for the purpose of organization. At that time the assignments to the different departments are made. Although the commissioners are in charge of separate departments they work in conjunction with one another. This is one of the principal reasons for the success of commission government—a spirit of unity permeates the meetings of the commission. The small body that is responsible for the governmental advancement of the municipality outlines a constructive policy to be pursued by their subordinates. This is surely an improvement over the old system, under which the management of every department, no matter how small or unimportant it might be, was placed in the hands of a man who was termed head of that department. This condition led to a confusion of authority and had a detrimental effect upon the efficiency of the department itself. The concentration of power and authority secured through the enforcement of commission government places such minor departments directly under one head and consequently greatly simplifies the management thereof.

All considered, the scintillating feature of commission government is the power of public expression that is given to the citizens themselves; the privilege of taking matters into their own hands if they believe their representatives fail to realize that public office is a public trust. This power lies in the initiative, referendum and recall. In order that these strictly inherent features of modern municipal government may not become the dangerous playthings of selfish whims or over-zealous rectitude, the founders of commission government have thoughtfully prepared a means by which their aid can only be invoked when so requested by a large percentage of the citizens of the community involved. The common mode of preventing the abuse of the initiative, referendum and recall is by requiring the filing of a petition signed by a substantial percentage of the citizens who desire to resort to any one of these three modern weapons of public expression. Thus, it would be an extremely difficult matter for a group of citizens actuated by personal bitterness or unfriendliness towards a commissioner to make use of the

recall unless substantial proof was offered which would clearly and conclusively show that the application for removal was based on well-founded contentions.

Speaking of the power of public expression that is given to the people under commission government, it should not be overlooked that this privilege is made possible principally through the extensive publicity that characterizes the actions of the commissioners. Publicity is one of the basic features of commission government. All meetings are held in the open, secret sessions and star chamber proceedings having no place in a government that essentially belongs to the people. The minutes of every meeting and the public records and documents are at all times open for inspection. Monthly statements dealing with finances and general proceedings are either published in pamphlet form or appear in detail in the leading newspapers. New ordinances are printed in full for a stated period in local papers. In many commission cities, when important measures come before the governing body, personal invitations are sent to a number of representative citizens for the purpose of holding a general and impartial discussion of the advisability of adopting or rejecting the proposed measure. The result of this wide publicity is that the ordinary citizen has an intelligent idea of municipal conditions and is also in a position where he can pass judgment on the relative value of the commissioners. There is no confusion, no obscurity, no chance for any dishonest measures to be slipped through without detection. Every elective officer becomes a shining mark for criticism—hence sensitive, responsive government. The ambition of every officer is to give good government, because that is the one way to keep in the good graces of the public. If, for unknown reasons, the commissioners should refuse to consider the adoption of a law desired by a majority of the electorate, it is within the province of the people to initiate action, take the matter into their own hands and decide whether such a measure shall or shall not receive official confirmation. Likewise, should the people's representatives be undecided as to the action they should take on a measure affecting the public welfare, they can submit the proposition for popular expression. Thus it but rarely occurs that an unpopular measure secures official sanction, due to those modern devices of municipal government, the initiative and the referendum.

All things considered, however, there is one particularly insepa-

able feature to commission rule that engenders governmental efficiency, and that is the recall. An official, realizing that his every act and recommendation decides his continuance in office, will, by natural inclination, strive for public approbation. This, he well knows, can best be secured by efficient administration. Under the old system of government it is possible for an elective officer to forget that he is simply a public servant and use his official influence towards securing favoritism for some private or corporate interest, because, having been elected for a certain number of years, he is beyond the power of removal until the expiration of his term of office. Under commission government, however, the remedy is very simple and easily applied. Upon adequate proof of the inefficiency or dishonesty of an official the dissatisfied voters can resort to the recall, and if the majority so rules the delinquent is legislated out of office, notwithstanding that he has still several years of his original term to serve.

To sum up briefly, it might be said that the chief characteristics of commission government are embodied in the following municipal reforms: centralizing responsibility upon a small number of elected officials; non-partisan elections; abolition of ward lines; economy of administration, greater efficiency, application of business methods; referendum, initiative and recall; simplification of the system and wide publicity.

Commission government in New Jersey has made startling progress in the short time it has been a governmental fixture in this state. The bill providing for its adoption was introduced in the 1911 session of the New Jersey legislature. The bill provided that a municipality, on the petition of thirty per cent of the voters who voted for the Assembly candidates at the last general election, might demand a referendum election on the question of a change of charter. The bill was vigorously opposed by the special interests and the old-time leaders of both political parties, but, like all the other progressive measures that have been introduced during Governor Wilson's administration, finally secured a place on the statute books of our state. The Trenton Chamber of Commerce, being deeply impressed with the necessity of a new and modern charter for the City of Trenton, waged a strenuous campaign for the passage of the bill. Trenton was the first municipality to take advantage of the commission law, the necessary signers to the petition being

easily found. The election was held on the twentieth of June, 1911. It resulted in an overwhelming victory for the commission forces, and the change became effective on the twenty-second of the following August.

Trenton has now been operating under the provisions of the commission government act approximately seven months, and in that time enough has been accomplished to show that the new charter is vastly superior to the one it superseded. Practically the first four months were devoted to the organization of the different departments which, when we took hold, were found to be in a state of chaos. With the enormous amount of routine business which each commissioner encounters daily, the task of reorganization was a heavy one and required long hours of constant application and careful study. The real legislative work of the commission did not actually start until the first of March, 1912, when the budget for the ensuing year was adopted. Consequently anticipated results, which were outlined at that time, cannot be looked for until the following year.

Although the reorganization of the various departments has been effected, there are still many things uncompleted that may have a further beneficent effect upon this organization. The financial statement of the city's resources and liabilities and the new system of accounting, which are being worked out by expert accountants, are now nearing completion and, when finished, will give us a perfect reorganization, fully equipped to transact business along modern and economic lines. In the reorganization of departments unnecessary clerkships have been abolished and all salaries that were found to be excessive have been reduced to a basis that corresponds with the salaries paid by corporations. In our efforts to economically secure necessary improvements we have prudently endeavored to follow a policy of retrenchment, and this policy has been followed consistently in every respect without crippling or handicapping the efficiency of the departments themselves.

When the commissioners assumed control of the affairs of the city they found nearly every department in the city in urgent need of additional appropriations. The budget was approximately fifty thousand dollars short of the amount necessary for the expeditious management of the various departments, and, of course, had to be revised; the resultant tax rate, therefore, which was slightly increased,

could not be numbered among the responsibilities charged to the commissioners. Every city has to pay for its improvements, and Trenton, especially, is an extremely expensive city, at least in some ways. It is built over a large area and consequently necessitates a greater number of schools and more fire and police protection than if it were compactly laid out, as so many of our larger cities are. For the same reason it also requires a greater expenditure for the proper care of its streets.

One thing that the commission has accomplished, which was never before attempted in Trenton and which will undoubtedly prove of future benefit to the city, is the taking of an inventory which will disclose in detail the many valuable assets belonging to the city. With detailed knowledge of the city's assets and liabilities, and a correct financial statement, the commissioners are now in a position to judge what burdens they can assume and what burdens they may safely inaugurate.

The abolition of salaried boards, whose duties are now being assumed by the Board of Commissioners, will be the means of considerable saving each year to the taxpayers.

In order to illustrate comprehensively the greater efficiency that marks the municipal management under commission government, it might be well to reveal a condition that was unearthed in one of our important departments some few weeks ago. The water department, as is the custom at certain intervals, had advertised for bids for hydrants, valves and other needed equipment. The bids, when opened, disclosed the fact that the company that had been particularly favored in past years had rigidly adhered to the practice of selling supplies to the City of Trenton at a price ranging from thirty to fifty per cent in advance of what the same articles were sold for to other cities. Up to the present this conundrum has remained insolvable.

In order to help solve the problem of city finances, the commission will empower the mayor to appoint a board to devise new sources of revenue for city purposes. The time has arrived when we should have sources other than taxation by which we could increase the city's income. Before this plan could be successfully worked out, additional legislation will probably be necessary. But it will be a very short time before we will be compelled to give thought to such a plan if we are to carry out contemplated improve-

ments and keep the tax rate from reaching a prohibitive figure. We are endeavoring to revise the system of poll and personal taxation now in vogue in Trenton with the idea of securing increased revenue for the city. Another innovation that should be productive of increased revenue is the creation of the office of Excise Detective. A stricter watch will be kept on the saloons and other licenses than heretofore. All violations are now promptly reported and the offenders justly fined. In connection with the excise question, it might be well to add that the commissioners have decided to grant no new licenses until the ratio of the saloons to the number of inhabitants averages about one to every five hundred. In all probability an advanced license fee will be adopted which will result in the elimination of many unnecessary saloons and in giving the police more direct jurisdiction over excise matters with the idea of elevating the saloon to a higher standard.

The commission has started action in several municipal problems that have hitherto been borne patiently by the city. One of these is to secure a reduced rate of gas and electricity and a better quality of both. This matter has been placed in the hands of the State Public Utility Commission for final consideration. The aid of this commission has also been invoked in an effort to eliminate the smoke nuisance which has caused untold damage to our public buildings and private residences.

Our police and fire departments have been increased and the Director of Public Safety has been instructed to purchase additional fire apparatus of the most improved type. The police department is doing better work than during any time since its organization and lawlessness and criminality are on the decline in Trenton. This is due to the alertness of the police and the stern and even-handed justice that is being measured out by the police court justice, who, with the aid of one clerk, is now doing the work that it formerly required two justices and two assistants to do. In connection with increasing the efficiency of our police department, the commissioners are considering the feasibility of establishing an ordinance school for patrolmen. Every ordinance passed by the commission in any way affecting the policemen should be intelligently explained to them and, under the plan suggested, this explanation would be made by a student of municipal law who would be competent to transpose the original wording of an ordinance into phraseology that would

be interpretable to the average man. This plan, if adopted, will prove widely beneficial to our policemen and also to the general public who are under their guardianship.

Another proposition that the commission is closely following and which will soon commence to have a noticeable effect on the growth of Trenton, is the Delaware River channel, which is now nearing completion. This will practically make Trenton a seaport city. Modern municipal docks will be constructed. Negotiations are already under way for the purchase of land for this purpose. It is but a question of a very short time before Trenton will be equipped with modern water shipping facilities.

Under a resolution recently adopted by the city commission, the mayor has appointed a commission to develop a systematic and comprehensive plan for future development. When this commission gets under way it will probably be one of the most important bodies in the official life of Trenton. Plans have been tentatively formulated for the future development of the city. The commission is composed of local engineers who will devote their time and knowledge gratuitously to the city in working out these plans. After this work is well under way, it is our intention to enlist the aid of expert civil and landscape engineers, men who are recognized as authorities in this line. In furtherance of the policy of securing a city beautiful, steps have been taken to have all unsightly telegraph and telephone poles removed from the streets and to have the wires placed underground. The business center and, for that matter, every section of the city are gradually being better illuminated. Plans have been worked out and the installation of a great white way, similar to those that are now in operation in some of our larger cities, will be commenced this spring.

The problem of grade crossings at railroads has received our attention and we are putting forth every effort to secure the elimination of these abominable danger points.

Several grave problems are confronting us which demand immediate attention, including the construction of sewage disposal and a filtration plant. The question of potable water has always been attended with a diversity of opinion in the City of Trenton. The commissioners, however, have decided that a filtration plant is what is needed and we have adopted a slogan, "Pure Drinking Water Within a Year," which we are irrevocably pledged to carry

out. During the past winter we were seriously threatened with a typhoid epidemic, caused by the impure water supply, during which the death rate increased with appalling regularity. Fortunately, however, through the application to the water of hypochlorite of lime an epidemic was averted. We have continued to treat the water by chemical processes as a temporary relief until a filtration plant is established. Arrangements have been completed for the construction of a modernly equipped filtration plant and sedimentation beds, legislative sanction having just been given to an appropriation of half a million dollars for that purpose. In consummating our plans we have had the advice of competent and experienced engineers.

As a further temporary relief, pending the installation of a filtration plant, the commissioners will install eight pure water supply stations at various points throughout the city for the benefit of the people living in the respective neighborhoods. The water is purified by ozone treatment. Remarkable success has attended the opening of one of these stations and hundreds of our citizens who are unable to purchase bottle water are taking advantage of the opportunity that has been afforded to obtain potable water.

Another institution that we have given to the city is a municipal tuberculosis hospital. This institution a few months ago was practically unheard of. To-day, however, the City of Trenton has a first-class tubercular sanatorium where sufferers from tuberculosis, especially those of the indigent class, can go and receive the best of treatment. It is equipped in the most modern fashion and a corps of capable nurses are in charge under the supervision of a very efficient supervising nurse. One of our three city physicians has been placed in charge of the campaign we have instituted against "The Great White Plague." We have also undertaken the establishment of a settlement for the city's poor and indigent sick. Tentative plans have been formulated whereby we can dispose of our city almshouse at a price that will approximately defray the expenses incident to establishing the contemplated settlement. Under this plan we would effect a centralization of our poor department which is in accordance with a policy we are attempting to pursue in all city departments. This settlement would include the city almshouse, tubercular hospital, city hospital, open air and night camps for tuberculosis patients who are able to work during the day. We

would also make provision for a children's hospital. It is our intention to place this settlement on a self-sustaining basis by utilizing the surrounding land for agricultural purposes. In this connection I might add that a medical dispensary will be opened shortly in the City Hall, where a doctor and trained nurse will be in attendance for several hours each day for the benefit of those destitute sick who are financially unable to pay for the advice of a physician, but who are able to come to the City Hall for treatment.

We have also organized a bureau for the consolidation of public charities which embraces the charitable organization connected with the various religious denominations of the city. Members of the Hebrew, Roman Catholic and Protestant churches are actively interested in this work, which is very extensive in its scope. In the past, charity cases, upon application, received aid from the city and in many instances would also seek assistance from the churches with which they were affiliated. With no central organization it was comparatively easy for undeserving persons to receive assistance. With the establishment of the Charity Bureau, the overseer of the poor will be placed at the head and a modern system of checking adopted. Every application for city aid will be diligently investigated before any money is disbursed. If the applicant is a Catholic, the Catholic societies affiliated with the bureau will conduct the investigation; if a Protestant, then it becomes the duty of the Protestant societies to report to the overseer and so on. In this way it is hoped to prevent undeserving cases from receiving aid. Duplication will also be stopped, for if a church organization decides to care for a case, the overseer of the poor will be so informed and city aid will not be forthcoming. Complete records of each case will be kept and a Charity Bureau committee will make a continuous study of each case with a view to effecting permanent relief.

Commission government in Trenton, although in its infancy, has accomplished many definite results. Open competitive bidding has been adopted for contract work; city advertising has been placed on a business basis; legal advisers to city boards have gone out of existence with these boards and in their place a legal department has been established; a city chemist has been included in the personnel of officials; theaters and moving picture houses are kept under strict surveillance; all city bills are paid promptly; city business is transacted more quickly than ever before; city employees

are required to devote their entire time to city work; weak places in the various departments have been bolstered up; substantial assurance has been secured of an improved trolley service; automobiles have been purchased to expedite the work of several of the departments and to secure greater efficiency; and, above all, business efficiency has superseded politics.

The time has been too brief, since the city adopted the new form of government, to accomplish all the reforms and improvements that have been undertaken. It requires time to bring about changes and to institute reforms. The principal work of the commission, up to the present time, has been to take the initiative in matters that were neglected in the past. Past errors were due to the obsolete system, not to the shortcomings or inability of the men; the system was at fault.

However, Trenton is giving an impartial trial to modern municipal government and, for that matter, to all the progressive policies that are now being agitated throughout the country. For along with commission government we are also working under the provision of civil service. Our citizens also, by popular expression, have decided to place the governmental affairs of the county in the hands of a small board of freeholders, which plan practically embraces the same fundamental principles as government by commission. The eyes of the nation are focused on our city and county; but we are willing to be placed in the limelight for we have unflinching faith in the efficiency and far-reaching effectiveness of our present system of government.

PART THREE

Bureaus of Municipal Research

THE NEW YORK BUREAU OF MUNICIPAL RESEARCH

BY GEORGE B. HOPKINS,
Trustee of the Bureau.

When the New York Bureau of Municipal Research was started people said, "You can never get efficiency standards accepted by New York." After several borough presidents had been "recalled" via removal on evidence of inefficiency, "albeit," as Governor Hughes said, "there is no evidence of personal corruption;" after accounting revision was started for all departments; after the period of public interest in budget making lengthened from two days to six months; after health work for children was reorganized, people began to say, "Oh, you can do such things in New York, but you can never make such methods work in Philadelphia, Cincinnati, Hoboken, etc." Yet, in January, 1912, Mayor Blankenburg, of Philadelphia, and Mayor Hunt, of Cincinnati, stated publicly that they believed the recent reform waves in their cities would "make good" because they started, as previous reform waves had never started, with a vast amount of definite information with respect to the city's business methods and with the promise of continuing co-operation of an informed citizen agency working through health, school, accounting, engineering and other research experts.

Just because municipal research concerns itself with methods rather than with men, just because it operates impersonally through discovering and publishing facts, it promises to be just as successful in one place as in another. Because there are more cities with fewer than 100,000 population, I shall cite concrete results that are reported from the expenditure of \$4,000 a year during 1910 and 1911 for the City of Hoboken, N. J., with a population of 70,000. Mrs. Robert L. Stevens was considering various alternatives—a wing to a hospital, a day nursery, etc., for a memorial to her husband. An officer of the Bureau of Municipal Research was asked on which he would spend \$2,500 a year. He replied, "Neither." When a substitute was demanded he replied, "Brains." Mrs. Stevens finally set aside \$4,000 a year for a three-year test to be administered by the Bureau of Municipal Research in co-operation with the people of Hoboken to

"increase year after year the number of mothers and fathers who will take an interest in Hoboken's city government." In two years this fund,

1. Employed a nurse who, after visiting 515 families in the interest of school children with physical defects needing attention, and 300 families in the interest of sick babies, has been regularly employed by the board of education.

2. Conducted a campaign on the summer care of babies which resulted in the employment by the board of health of two visiting nurses and a milk inspector.

3. With the Board of Education held a dental hygiene exhibit, which hastened the opening of a dental clinic for school children.

4. Made the investigation and promoted the legislation which led to state-wide supervision of weights and measures.

5. To guide charter making, published a digest of the laws and ordinances pertaining to the powers and duties of city officials.

6. Published a directory of charitable and civic agencies.

7. With the Board of Trade gave a largely attended budget exhibit, and, in addition, arranged a budget Sunday and budget hearings.

8. Disclosed a deficit of over \$300,000 in sinking fund provisions, and proposed a plan for adequate future treatment.

9. Emphasized the need for proper and adequate accounting methods for the city's business which the three candidates for mayor in 1911 pledged themselves to introduce.

10. Effected savings in the bills for public printing, purchase of supplies, etc., and showed where and how thousands of dollars could be saved yearly. (The one local daily newspaper's refusal to print facts about government was turned into an important asset by competing papers which gave publicity.)

11. Arranged a charter conference for January 3, 1912, between Governor Wilson and the mayors and corporation attorneys of twenty New Jersey cities.

12. Took the preparation of an administrative code in collaboration with the committees appointed by the governor.

13. Assisted the Board of Education and other civic bodies in the organization of a school extension committee.

14. With the State Federation of Women's Clubs and the commissioner of education has outlined a state-wide study by women's

clubs of the public schools as to medical inspection, promotion and retardation and sanitation.

15. Set an example which has affected nearly all Jersey cities which are more convinced by Hoboken's experience than by New York's, because Hoboken seemed less hopeful than they.

Viewing this work from a distance the editor of the *Christian Science Monitor* (Boston) recently wrote of the municipal research method:

A mountain hamlet may, relatively speaking, be more in need of social reform and uplift than an urban industrial center. . . . A flourishing and outwardly attractive suburb may have as much "graft" in its government as the city where its men earn their incomes and where its women find their amusements and do their shopping. Whether the suburb has honest government or not depends in the last analysis on the same conditions that determine urban probity or venality. . . .

This was conclusively demonstrated in Dobbs Ferry, a New York City suburb, in an election just held. Candidates were forced to assent to or dissent from a clearly defined community program that took a look ahead; to pledge themselves to favor free public discussion by citizens of all proposals involving expenditure of money; to promise to keep town accounts and to make assessments after a plan devised by expert municipal accountants; to establish a local information bureau with facilities for enlightening applicants at any time; and to unite with officials of adjoining towns in campaigns outlined to promote the well-being of all persons in that region of Westchester County.

It is superfluous to remark that even a campaign run on such a plan of tactics would be educational even though reform candidates were at first defeated. But they were elected. What Dobbs Ferry has done other villages can do, especially if, as in this case, women intent on civic uplift are numerous. *The Bureau of Municipal Research lives to serve; and it knows no distinctions based on size of the community applying for aid.*

The following incident illustrates the value of a "continuing memory" among business men to parallel that continuing memory among politicians which has so often proved its effectiveness. It has never before been published, but, as a trustee of the Bureau of Municipal Research, and a friend of several city officials involved, I feel justified in including it in an efficiency number of *THE ANNALS*. At the first meeting of the Fusion-Gaynor Board of Estimate and Apportionment, the first week of January, 1912, nine resolutions were introduced and passed, all looking to the systematizing of city business. For example, they provided for a comprehensive study of

teachers' salaries, for a corporate stock budget, for standardizing salaries, grades, supplies, etc. So businesslike was the meeting that the newspapers featured it with glaring headlines and congratulated taxpayers upon the new standard of public responsibility and foresight shown by the new officials. Every one of those resolutions was suggested to the officials by the Bureau of Municipal Research, immediately after election. Not only were they explained, and justified by facts based upon four years of intimate study of city business, but they were actually typewritten, brown-backed, delivered to the Board-of-Estimate members' baskets on the morning of the meeting, and multigraphed and distributed for use by newspapers. Thus the new administration started higher up and further on its first Friday than its predecessors ended after four years.

Another illustration is typical of the municipal research method and its advantages: After Mr. Prendergast's election as comptroller of New York City, he was told that a certain bureau having twenty-three employees needed thirty more men to do the increased work assigned to it. The comptroller asked for a bill of particulars from those recommending the increase and from the bureau. The bureau's report read:

"The duty of 'John Doe' is to post items from vouchers and warrants into a register or ledger. These operations 'John Doe' made during the months of November and December at the rate of one for every eight minutes. Dividing the number of entries required by the number of entries one man can easily make in one day, fourteen men should do twice as much work as twenty-three men have been doing." Nine men were dropped.

An interesting incident in co-operation was the bureau's help in the selection of an expert staff to install a revised accounting system. The bureau secured the co-operation of various accounting houses in recommending men to Comptroller Metz, then interviewed these men to see which had superior technical qualifications, and reported the facts to the comptroller. While the request for \$40,000 for this special staff was pending, a prominent member of the board of aldermen demanded four of the positions as a condition of his furthering the special revenue bonds. Comptroller Metz replied that the applicant could have the whole \$40,000 if he would have his men meet the qualifications, i. e., at least five years' experience as an accountant plus proof of special competence for this work. The

answer was, "What in blankety-blank-blank could I do with jobs like that on the Bowery?"

After working with the bureau for four years Comptroller Metz established a fund of \$10,000 a year for three years for promoting efficient municipal accounting and reporting in American cities. This fund has been issuing "Short Talks" to city officials which constitute a sort of question and answer department on accounting and reporting matters. These talks have included methods of treating sinking funds, how to make up a budget, the advantage of budget exhibits, etc.¹ The fund will issue shortly a report of a field study by Henry Bruère, director of the bureau, on the way commission government is working in ten commission cities. This was the first study of its kind. Two thousand questions were applied to each city covering (a) survey of the physical condition of the city, (b) conferences with representative citizens of all kinds, and a critical examination of (c) organization, (d) personnel, (e) records, and (f) work methods.

Of this municipal research plan of focusing public attention upon methods and results rather than upon men and parties, and its continuous between-election effort to inform the public regarding public business, Mayor McClellan said:

"The service of the bureau in purely municipal work marks a new departure in city government,—the active co-operation of the public with the city administration."

Governor Hughes said:

"The character of the bureau's investigation to aid administration in city affairs marks one of the most important improvements of recent years. It is striving to get at the facts in an honorable, straightforward way, and is striving to present them so that they will be intelligently comprehended."

Finally, when President Taft secured an appropriation from congress for the commission on economy and efficiency, he chose a director of the New York Bureau of Municipal Research to apply to all national departments the same methods of administrative research which have paid such large dividends wherever tried. Copies of the commission's reports may be had by writing to Dr. F. A. Cleveland, Chairman, White House offices. One of the newest appli-

¹ See "A National Fund for Promoting Efficient Municipal Accounting," by U. L. Loomis, Part IV.

cations of the method is a study soon to be finished (by the New York Bureau through the Training School for Public Service) of the public school system of Wisconsin. For this report address State Board of Public Affairs, Madison, Wis., for which the study is being made. The methods and results of municipal research in its home city have been succinctly stated and described in a pamphlet issued in January, 1911, by the New York bureau entitled, "Six Years of Municipal Research for New York City." I am authorized to state that copies of this bulletin may be had by addressing the editor of *THE ANNALS*, or the Bureau of Municipal Research, 261 Broadway, New York City.

Among the larger benefits of the municipal research method that may be duplicated in kind by any city whose public and private agencies will use the same methods should be noted:

1. Establishment of the principle *that the majority has no right to impose wasteful and incompetent government upon the minority*—through the removal by Governor Hughes of Borough President Ahearn on evidence of incompetence and waste first furnished by the bureau, and the later removal of two other borough presidents on evidence from commissioners of accounts and taxpayers agencies.
2. Reorganization of the department of finance with notable improvements in its methods of inspection, audit, payment, collection, reports, etc.
3. Accounting revision for all city departments with beginnings of time sheets and service records as the basis for auditing pay rolls.
4. Budget reform, budget exhibits, budget publicity, budget conferences of social workers, clergymen and taxpayers.
5. Conversion of the commissioners of accounts' office from a handicap to civic progress into a potent agent for efficiency and honesty.
6. An increase of \$2,000,000 a year in revenue due to the reorganization of water collection methods.
7. System and economy substituted for waste and chaos in the repairs and stores methods of the water department and in the purchasing and repair methods of the police department.
8. Establishment of a bureau of child hygiene in the department of health and the extension of its work for school children and infants.

9. Cessation of many slaughter house evils through more efficient inspection by the Department of Health.

10. Recovery of \$848,000 from street railway companies for paving done at public expense between the companies' rails, and suits pending for \$175,000.

11. Correction of abuses in connection with street assessments.

12. Projection of official inquiries into teachers' salaries, standardization of supplies, standardization of salaries and grades, school efficiency, health efficiency, etc.

13. "Corporate stock budget" by which requests for permanent improvements are systematically analyzed and compared with one another and with actual needs, substituted for the sporadic voting of capital charges without regard to need or plan.

14. Early and continued listing of dangers to the city's business methods threatened by the various revised charters of 1911.

15. Questions and facts were presented regarding the city debt which were used by all sides of the city debt controversy and led to permanent settlement of forty-three doubtful questions.

16. Ten million dollars released for reduction of taxes in 1912, by reconciliation of comptroller's and departments' books.

17. The bureau furnished the chairman of the first and second Greater New York Conference on Summer Care of Babies.

18. Investigation of the city's relation to private charitable institutions receiving city funds and to juvenile dependency, leading to sweeping revision of methods by private institutions and by the city.

19. The reorganization of public works, Manhattan saving in two years a million dollars and greatly increasing the quality and quantity of work.

20. Investigation by the commissioner of accounts which led to the removal of Borough President Haffen of the Bronx and to reorganization of his office.

21. For six years aldermanic and Board of Estimate officers have acted upon results of bureau investigations into innumerable proposals, frequently resulting in the abandonment or serious modification of proposed appropriations.

22. Budget-making committees of the Board of Estimate and apportionment have for five years used the bureau's services in studying estimates, drafting questions, etc.

23. The facts, as given by a citizen, on which the plot to sell the city \$700,000 worth of dirt was thwarted and the landscape architect removed, were confirmed and presented by the bureau.

24. Inclusion in all charter revision reports of numerous provisions based upon the bureau's suggestions as to business organization and procedure.

25. A study of tenement house administration through a contribution of \$10,000 by Mr. George H. F. Schrader, which helped secure increased appropriations for removing dark rooms, school sinks, etc.

26. Inclusion of dock department expenses in the annual budget, with a saving the first year of over \$400,000.

27. The publicity work of the Committee for the Reduction of Infant Mortality in connection with the milk stations and infant mortality in the summer of 1911 was conducted by the bureau at the committee's expense.

28. A general acceptance of the proposition that by studying official acts and community needs between election times citizens can guarantee continuous efforts for civic and social betterment.

29. City government is more generally seen to be inevitably either a help or a hindrance to church aims, philanthropy, education and business, according to the attention given to government by churchmen, philanthropists, educators and business men.

President McAneny said at a municipal efficiency dinner, January 4, 1912:

" . . . I might mention a long . . . list to illustrate what can be done upon the administrative side, but I repeat that nine-tenths of it has been the work of the Bureau of Municipal Research and of men within the service who have been inoculated with their ideas, with their enthusiasm, and who have accepted service under me and have worked with them all in the same general direction and with the same general purpose."

On the same occasion Comptroller Prendergast said:

" . . . We want that kind of intelligent criticism. We want it to go on and on and we want the unthinking part of the public to understand the real function of this institution that is trying to build up a better city for all the people."

On the record, of which the above gains are but partial indications, a National Training School for Public Service has been started and is being conducted by the bureau. After examination of these same results by comptrollers, mayors, public-spirited citizens and officials, the administrative research method is now being applied in cities throughout the country by numerous organizations, within and without city and state governments, such as chambers of commerce, taxpayers organizations, women's clubs, boards of aldermen. For example, Comptroller Taussig, of St. Louis, secured a fund of \$25,000 a year for installing an efficiency bureau in his office and put at the head of it Mr. Peter White, who worked in St. Louis first as a representative of the Bureau of Municipal Research in its charter study for the St. Louis Voters' League.

Three other results due to the success of municipal research in New York, Cincinnati, Cleveland, Chicago, etc., which are of inestimable value are:

1. Change in the attitude of accounting houses toward municipal accounting and corresponding increasing demand from municipalities, state and national departments for accounting or efficiency service.

2. Notable change in the attitude of public officers and employees toward their work. Experience has proved now that the public will discriminate between efficient and inefficient service if facts proving efficiency or inefficiency are given to the public. Under the spotlight of publicity respecting methods and results, a new type of man gains leadership in public office; namely, the man who can "make good" to the public. Formerly, the man who was fittest to survive was the man who "made good" with the outside powers of politics, contractors, etc.

3. Universities and technical schools and high schools too, so fast as concrete facts are supplied, will change the content and method of instruction in government so as to prepare students for efficient citizenship between election times.

To launch this program has cost public-spirited men and women in New York \$460,000 since 1906. Citizens in Philadelphia, Cincinnati, Chicago and Memphis have spent \$250,000. The President's commission on economy and efficiency has spent roughly

\$200,000. But the near million dollars thus far spent in municipal research is small compared with the millions that are being spent by government agencies in applying efficiency tests to public business, and is a mere bagatelle compared with the hundreds of millions of dollars that are now being spent in a sincere effort on the part of officials and employees to serve the public efficiently.

Municipal research is a method, not a panacea. It aims not to make over either the man in office or the men who vote, but to give men as they are better methods of working for the public and to give the public as it is better methods of watching and judging what their public servants do.

There is not a city in the country where the majority of voters want inefficiency, waste and dishonesty. There is not a city where the majority do not resent incompetence, waste and dishonesty, whenever and wherever they can see it. Municipal research will put a premium on efficiency and economy wherever it is so financed, and so equipped with experts, that it can keep alive, between election times, interest in the reasons for good government and can provide non-partisan, non-political, continuous emphasis upon the requirements, methods and results—as distinct from the personalities and politics—of public business.

THE OUTLOOK FOR MUNICIPAL EFFICIENCY IN PHILADELPHIA

BY JESSE D. BURKS, PH.D.,
Director, Bureau of Municipal Research.

The mayoralty campaign of 1911 in Philadelphia was conducted, by both of the leading candidates, upon the platform of business economy and efficiency. There were charges of graft and corruption, and appeals to political regularity; but, in the main, the interest of voters was focused sharply upon administrative problems—business organization; the development of public works; the use of the city's credit; the protection of public health; the promotion of education; the purchase of supplies; the control of contract awards; the selection of efficient personnel for public service; the elimination of waste and inefficiency.

Hon. Rudolph Blankenburg, the successful candidate, made his appeal to the electorate of Philadelphia on the issue of "a clean, progressive, constructive administration." In the brief and trenchant "platform" which he issued as a campaign document, he laid stress on the following principles: "Only one favored contractor—the lowest possible bidder; one hundred cents return for every dollar expended; no illegal or wasteful use of city funds; current receipts must pay current expenses; new loans for permanent improvements; fitness, not party service, the first consideration for appointment to office; sound education, combined with moral, physical, and technical training for children. Commodious schools, healthy surroundings, ample playgrounds, and all attainable elements that will promote happiness and foster citizenship."

The principles embodied in this brief platform were reiterated, amplified, and given concrete interpretation during the progress of a campaign notable for its vigor and for its emphasis on community needs, community opportunities, and citizen responsibility, rather than for its appeal to personal prejudice and partisan motives. On the day following the election, the mayor-elect committed himself anew to a program of municipal efficiency by stating publicly:

"Every pledge I made in my campaign will be strictly carried out. The people know me, and they know that I will do as I say."

By explicit statement and by the whole tenor of his campaign appeal, therefore, the present mayor of Philadelphia has invited the community to look for that oft anticipated and seldom realized ideal—a well managed city government. Furthermore, the course pursued by the mayor during the first three months of his administration has still further confirmed the expectation and confidence which his pre-election pledges aroused. As heads of the municipal departments, he selected five men of rare administrative and business qualifications. Unhampered by political affiliations, each of these directors has a free hand, within his legal powers and financial resources, to conduct the affairs of his department in the interest of efficient public service. As a unit, these executive chiefs are committed to the mayor's program of business administration. Changes in the personnel of the municipal service, it is generally conceded, have been made in the interest of efficient service rather than of political advantage.

The present situation in Philadelphia, therefore, presents most of the factors commonly regarded as the necessary elements of an efficiency program. These are: first, a mayor of energy, intelligence, and unquestioned integrity; second, charter powers of unusual scope which make it possible for the mayor to exercise effective leadership in the management of the city; third, executive officials free to pursue their policies without the restraints of partisan political alliance; fourth, executive heads of departments of high ability, each free to administer the affairs of his department solely with a view to economy and efficiency of service; fifth, a civil service commission definitely committed to the "merit system" as the method of selecting municipal employees; sixth, the confidence and optimism of a large proportion of the substantial citizens of the community.

As commonly follows such an outcome of a "reform movement," the great majority of citizens who sincerely desire efficient municipal government in Philadelphia assume that these six factors will insure "good government" for four years, at least. They assume, furthermore, that having performed their functions as voters, little responsibility rests upon them, for the coming four years, but to enjoy a sense of civic virtue and security, and to applaud occasionally the achievements of their thoroughly competent officials.

So far as integrity, worthy intentions, and high ability of officials can insure good government, this confidence of citizens is doubtless well placed. The fallacy lies in the assumption that official integrity, purpose, and ability alone are a guarantee of efficient city management; that citizens have no part in municipal government between election times; that officials can and will work to the best advantage without the stimulus and support of an informed, alert and exacting citizenship.

A situation in many ways similar to that which now exists in Philadelphia occurred in New York in 1901 when, after a strenuous and exciting campaign, the people of that city elected Seth Low as their mayor. In a recent contribution to the *North American Review*, Mr. R. Fulton Cutting, who, as leader of the Citizens' Union, was largely responsible for the election of Mayor Low, makes the following significant comment upon the results of the Low administration:

"He brought to this high office capacity, integrity, industry, and wide experience. He selected subordinates for their specific qualifications and high character. The two years of his administration set a new standard of official morality, but in economy and efficiency it failed to realize public expectation. It was compelled to operate with a business system obsolete or framed to mislead rather than to enlighten the responsible officials. The great body of employees, largely protected by a civil service law and unsympathetic with reform, made no effort to hold up the hands of the department heads. These in turn, because responsible for the conduct of daily business and occupied with large policies, could not devote themselves to the reorganization of a force of fifty thousand unwilling employees. The wonder is that Mayor Low accomplished what he did in his short but memorable administration. His mayoralty, however, conclusively disclosed the insufficiency of reform by the ballot. The man without the machinery, animated by the noblest ambitions, is compelled to pursue them with an antiquated, rusty, unreliable mechanism that paralyzes progress."

In Philadelphia to-day, as in New York ten years ago, we have a group of officials facing administrative problems of great complexity and difficulty—handicapped by an administrative organization and methods of conducting business that make it all but impossible for these officials to satisfy the public expectation. It is as

if, in an age of rapid-fire guns and high explosives, an army of brave, strong men were sent forth to battle, equipped with blunderbusses and wet powder.

In most of the city departments and bureaus, the organization is such that newly appointed administrative officers find it difficult or impossible to ascertain the exact powers and duties of the several units in the organization. Clear definitions of functions and authority do not exist; and until the official, by a long and tedious process of direct experience, has become familiar with the organization with which he is expected to work, he is not in position to readjust functions, to do away with conflicts and inconsistencies, to centralize and definitely locate responsibility, and to place each officer and employee in position to render his most effective service. And, by the time an administrative officer has become familiar with the problems involved in a reorganization of his office, he may have reached the close of his term of office, only to pass on to his successor the same handicap of defective organization which he himself inherited.

Commenting on the organization of one of the most important bureaus of the city government, one of the recently appointed departmental directors in a letter to the Bureau of Municipal Research says: "I find this bureau in a very demoralized condition, and absolutely lacking the primary elements of an organization. There is no one part of its work, as I found it, that even approximates a satisfactory condition. We now wish to get down to the details of work and provide something like system. Not having any available material to help me in this work, I find it necessary to solicit outside help, and will greatly appreciate the favor if you can see your way clear to assist me in the matter suggested."

Assuming, then, the great advantage of "good men" in office, the outlook for municipal efficiency depends first upon the extent to which the details of organization—of the division, distribution, and co-ordination of functions—can be studied and the results utilized in reframing the functional structure of the municipal departments, bureaus, divisions and offices. A second element, of like importance, is the need for efficient methods of performing the various functions for which the municipal organization is constituted.

Administrative officers in Philadelphia, as elsewhere, are handicapped by archaic methods of doing work that have long since been

discarded in well managed private business. Tax rolls are laboriously copied by hand in triplicate, instead of by typewriters and carbon process. Bills for taxes and water service are deliberately written out "while you wait," instead of pre-billed and filed for instant reference. Highly paid officials spend time in signing individual vouchers, pay rolls, and warrants, instead of having such documents listed on schedules that will permit of a single signature where the entire list is to be approved. Each department or office employs a different classification of appropriation and expenditure items, which makes impossible a compact summary statement of the city's financial transactions showing functions performed and cost incurred for each function. Methods of carrying on milk inspection, tenement house inspection, and medical inspection of school children, make it difficult for officials or citizens to see clearly the results or the cost of work undertaken, or work done. Methods of preparing financial estimates, of considering these estimates, of formulating and voting the annual budget of appropriations make it impossible for citizens, taxpayers, or officials themselves to get a clear picture of the financial and social program which the budget is assumed to embody, and to exercise their best judgment as to the relative values of proposed items of expenditure.

Efficient management obviously depends upon accurate, complete and prompt information; making available to the administrative officer in usable form the details of past experience, of present activity and of proposed plans. The most serious obstacle to an efficiency program in Philadelphia is the lack of concrete facts as a basis for judgment. The Chief of the Bureau of Highways finds it impossible without special and costly inquiry, to get such simple facts as the number of miles of paved streets, the extent of repair work urgently needed, or a list of highways which contractors have agreed to keep in repair for a specified time. The Director of Public Safety finds it impossible to determine precisely what duties are performed by the various divisions of the police force, what work is being done to prevent fires, or what functions are performed by the electrical bureau. The Director of Public Health has no ready means of determining what number of those defects found by medical inspectors among school children have been corrected; the cost of service in the general hospital; or the number of babies born during a given year. The mayor cannot possibly ascertain at any desired

time what the city owns and what it owes, what funds from revenues and from loans will probably be available during his administration, or what specific economies may reasonably be anticipated in his program for reducing operative costs.

Potentially, the most important source of information as well as the most effective instrument of financial control is the city budget. A single typical item from the financial estimates of Philadelphia for 1912 illustrates the obstacles which indefinite, unanalyzed, and therefore unintelligible financial statements offer to open-eyed, efficient management. Item 20, of the estimate of the Bureau of Highways and Street Cleaning reads as follows: "For repairing, altering, and extending sewers and inlets, trapping and retrapping inlets, and cleaning sewers, \$75,000."

It is obviously impossible to determine from this statement what part of the \$75,000 is requested for the various kinds of work named; to determine whether the proposed work is to be done by contract or by direct labor; and if by direct labor whether the amount named is to cover labor or materials or both. On inquiry and analysis, the item breaks up into the following elements:

| | |
|---|----------|
| Foremen, five at \$1,200..... | \$6,000 |
| Sewer constructor..... | 1,500 |
| Bricklayers, four at \$5 per day (303 days)..... | 6,060 |
| Laborers, at \$2 per day (6,070 days)..... | 12,140 |
| Driver with team and vehicle at \$6 per day (1,600 days), | 9,600 |
| Contract work..... | 39,700 |
| | <hr/> |
| | \$75,000 |

Within this single item then, as it originally stood, are included requests for salaries, wages of regular employees, wages of temporary employees, and work on contract.

Ambiguity similar to this in many items; lack of uniform classification as to "objects of expenditure" in the estimates and appropriations; absence of any satisfactory and consistent grouping of items under such functional headings as "administration," "inspection," "operation," "maintenance," and "construction;" and unsatisfactory typographical arrangement seriously limit the important purposes which the Philadelphia budget might serve. It is, in fact, not uncommonly regarded as a grab-bag of individual and unrelated appropriation items. It cannot be summarized in such a way as to

focus the attention of citizens, executive officials, or councils on the city's program as a whole as well as upon details of the program. Thus, in many ways, the budget obstructs rather than facilitates the consideration of questions of municipal policy and stands between the community and its responsibility for deciding what it will do through the municipal government, to protect and promote the welfare of 1,500,000 citizens whose interests are at stake.

Such defects in organization and administrative methods as those described are, of course, not peculiar to Philadelphia. They are not limited by latitude, longitude, or climate; but are found in all cities where force has not yet broken down the fallacious notion that for some mysterious reason municipal business methods must differ from methods in well administered private business.

The purpose of directing attention to these defects is not to suggest a pessimistic outlook for municipal efficiency. It is rather to suggest the futility of a vague, uncritical confidence that does not face squarely the details of constructive work involved in any real efficiency program; and to suggest also the unreasonableness of much of the criticism aimed at officials who, because of inadequate machinery and slovenly methods inherited from the past, fail to satisfy the demands of well meaning but uninformed citizens.

Philadelphia officials clearly realize that the measure of their achievement is to be the success with which they meet specific problems and that success depends, in large measure, upon the intelligent support of citizens. The mayor has asked and is receiving the co-operation of volunteer citizen commissions. Departmental officers are seeking expert advice and service wherever it is available. Civic and philanthropic bodies having proposals backed by facts are encouraged and invited to co-operate with the government in the study of community needs and the solution of community problems.

Assuming, then, that the chief obstacle to a municipal efficiency program lies not in unwilling or incompetent officials but in defective administrative machinery; and assuming also the readiness of officials to accept intelligent criticism and co-operation, the main burden of responsibility for continued failure rests upon citizens rather than upon officials.

The varying fortunes of political parties and of individual

office holders make it difficult and uncertain, even for an officer of clear purpose and high ability, to work out a progressive and continuous program for the improvement of a public office. An independent citizens' organization, on the other hand, having a permanent and continuous program, is able to gather up the results of policies and methods pursued under successive administrations, and in various departments; to subject these to critical analysis and comparison; to establish administrative standards; and to make these available to an officer at the threshold of his term of office, as a basis for a prompt and clear understanding of his administrative problems and of the methods best adapted to their solution.

This is precisely the program of municipal research. During three years, the Bureau of Municipal Research of Philadelphia has worked in constant and active co-operation with city officials, including the mayor, the controller, the Board of Education, the chiefs of the numerous bureaus and the directors of most of the city departments. Muck-raking has been no part of the Bureau's program, although facts, even when disagreeable or discreditable, have been impartially laid bare to officials.

In his paper on Philadelphia's accounting system,¹ Controller Walton describes the reorganization of the city's accounting system which was undertaken with the co-operation of the Bureau of Municipal Research.

The city now has the central core of an accounting system that will stand comparison with that of any modern industrial or commercial enterprise. Important steps have been taken which enable the Controller, through compactly formulated balance sheets, to exhibit currently the city's assets and liabilities; its revenues and expenses; and the condition of each fund with respect to balances available for appropriation, reserves set aside for contracts, and unexpended balances. In connection with this accounting revision, an inventory of the city's properties was taken for the first time; over \$250,000,000 of city property being placed on the Controller's books, and provision made for current additions and withdrawals necessary to keep the inventory up to date. Statements in separate balance sheets showing assets and liabilities that apply to the city's current operations, and those that apply to capital operations involving the acquisition of permanent properties, enable the official or taxpayer

¹ See page 64.

to see at a glance the financial results of these two distinct classes of transactions.

The Controller is now planning, with the co-operation of the Bureau of Municipal Research, to extend this system of accounts into all departments of the city government and thus to bring under central accounting control the current transactions of every department from the time liabilities are first incurred to the time they are finally discharged; and to give similar control over miscellaneous revenues as they accrue. Such a system of accounts, by furnishing currently, promptly and exactly the important details concerning the city's business, not only gives the Controller the means of effective control over receipts and expenditures, revenues and expenses, properties and liabilities; but, by providing the basis for properly classified and summarized information regarding the cost of every municipal department, activity or enterprise, the completed system of accounts will furnish the only safe starting point for a municipal program of economy and efficiency. It will make it possible for administrative officers and citizens to apply fact-standards in place of opinion-standards in the consideration of municipal problems.

Standardization of medical inspection methods has enabled the Bureau of Health to get physical defects of school children corrected, where formerly they were only reported and registered. Standardization of school census methods has given the Board of Education accurate information in place of unreliable guesses as to what children should be in school and what children are actually there; and, incidentally, by giving an accurate census, increased by \$75,000 per annum the city's portion of state school funds.

A study of the milk inspection service of the Bureau of Health resulted in radical changes in method, more stringent standards of temperature and cleanliness, and a marked improvement in the milk supply of the city. Closely related to this was the establishment of the division of child hygiene, with its corps of visiting nurses; the opening of outdoor hospitals and milk stations on recreation piers; the report of the mayor's milk commission; the holding of the milk show; the opening of the Babies' Hospital; and the reduction, by thirty per cent, in the deaths of infants under one year old in Philadelphia—a saving of 1,110 infant lives in the first eight months of 1911.

An investigation of weights and measures disclosed the utter

lack of municipal control and a tremendous loss to citizens through short measure; laid the foundation for an effective state law; and opened the way for municipal supervision of weights and measures.

A co-operative study with the department of supplies has brought out the vagueness and the ambiguity of specifications which has discouraged competition and made possible favoritism. A beginning has been made of standardization of specifications which will eventually result in immense financial saving to the city.

An investigation of business method of the Bureau of Charities showed that the city was being systematically defrauded and the inmates of the charitable institutions furnished with food and other supplies of definitely low grade. Conflicts in authority, ill-defined responsibility, and other serious defects of organization were shown to exist; and the plan under way for developing the city's charitable institutions shown to be ill considered, inadequate and wasteful. Plans for reorganization were submitted and are now being worked out by the director through a newly appointed superintendent.

A revision of the financial estimates of all city departments for 1912 was formulated as a tentative basis for a city budget that will lend itself more readily to intelligent consideration by councils, the mayor, citizens, taxpayers and the public press. The items in the estimates of all departments were reclassified on a uniform basis; each item being made so definite that its purpose is unmistakable, and the way thus opened for the adoption of a budget that shall present a well defined financial and social program for the community and an instrument of effective financial control in the hands of councils and the city controller. The mayor, his department heads, the controller and many members of councils have given their approval to the proposed financial plan, and there is strong assurance that it will be put in operation next year.

By far the greater part of the information obtained in such investigations has been submitted confidentially to officials without publication. It has been found that the co-operation of officials might best be enlisted in this way. Officials have uniformly shown a willingness to use the information and constructive suggestions thus submitted, for correcting defects in administrative methods. The Bureau of Municipal Research has assumed that the public official should be permitted to take credit for measures intended to raise the efficiency of the public service, rather than be subjected

to public criticism for waste, inefficiency and infidelity due to un-businesslike organization and methods.

Shortly before the close of the recent mayoralty campaign the Bureau of Municipal Research submitted to each of the nominees a series of proposals as to definite steps which its study of the business management of the city has shown to be possible and desirable. It was suggested that a statement from the candidates concerning all or any of the proposed steps would be of timely interest to citizens and taxpayers "whose final rating of Philadelphia's next mayor will depend upon specific forward steps taken, specific things avoided, specific conditions corrected, specific needs neglected, specific opportunities realized."

A summary of the proposals and responses will define more clearly the outlook for municipal efficiency in Philadelphia as it appears to the Bureau of Municipal Research and to men whose responsibility and interest is the actual administration of the city's business. The statement submitted to the candidates was substantially as follows:

What Philadelphia Expects of Her Next Mayor

Philadelphia's expectations as regards her next mayor are unusually high, unusually definite, unusually exacting.

It goes without saying that Philadelphia expects her next mayor to give the city an "honest and businesslike" administration. But citizens are every day coming to see more clearly that "businesslike administration" means a good deal more than meeting a few so-called "issues," in spectacular fashion; that it means solving, day in and day out, innumerable definite problems that call for clear knowledge, prompt decision and effective action, as well as public spirit and honest intentions.

Unrealized expectations mean a discredited next mayor. In fairness to her next mayor, therefore, and in the interest of her own clearness of vision, Philadelphia should formulate some statement of the community needs which she wishes to have met; of the specific things she wishes to have done or not to have done; of the specific tests which she proposes to apply to her mayor during the next four years.

As an agency of citizen inquiry and co-operation, the Bureau of Municipal Research emphasizes the obligation resting upon citi-

zens as well as upon officials to inform themselves promptly, regularly and accurately as to what acts are performed, what service rendered, what results accomplished, and what expense incurred; so that responsibility may be clearly fixed; economy, efficiency and fidelity encouraged; waste, inefficiency and dishonesty eliminated.

With this end in view, the Bureau of Municipal Research will use its resources to get facts, to locate defects, and to find the steps necessary to correct defects. It will place the results of its inquiry at the disposal of Philadelphia's next mayor, and endeavor to enlist the support of citizens and taxpayers in every step he takes toward economy and efficiency in the public service.

Some Things Philadelphia's Next Mayor Must Do

1. He must appoint five efficient or inefficient heads of departments to direct the operation of twenty-two bureaus and offices expending about \$23,000,000 annually.

2. He must enforce discipline, or encourage indifference among 7,000 city employees with a pay roll of \$8,500,000.

3. He must set the pace, determine the point of view and sense of responsibility of departmental officials and employees who will be quick to see the spirit and business methods that dominate the mayor's own office.

4. He must prescribe a high or a low standard of qualifications for officials and employees to be named by department heads for positions exempt from civil service regulations.

5. He must determine whether investigations by the mayor's bureau of contracts and statistics shall be thorough or superficial, partial or impartial, useful or useless; whether the results of such investigations shall be made public, or pigeonholed, and whether the findings shall be acted upon or ignored.

6. He must determine the secrecy or the publicity with which each city department conducts public business.

7. He must protect and strengthen, or neglect and weaken the city's credit.

8. He must determine the kind of evidence that he will require as basis for approving or disapproving specific items in the annual budget as passed by city councils.

9. He must determine the basis upon which he will approve or disapprove specific items in ordinances authorizing the issue of

bonds. (Bond issues amounted to \$5,000,000 in 1910 and \$12,650,902 in 1911.)

10. He must control or fail to control the content, distribution and cost of city advertising, for which \$104,524 is requested in the estimates for 1912.

11. He must determine whether the city shall be protected or defrauded in the purchase of real estate, by demanding or failing to demand appraisals by disinterested real estate experts, and other evidence as to value, fitness, urgency of need and availability of alternate sites.

12. He must expedite, ignore, or obstruct the work of the city controller looking toward a progressive revision of the city's business methods—including a reorganization of the accounting system, effective audit of bills against the city, and independent inspection of supplies, materials and work.

To the mayor, as the business head of the government, Philadelphia looks for intelligent direction of a community program, the heads of departments being his representatives in their several fields. Philadelphia, therefore, will not distinguish sharply between results which her next mayor can accomplish single-handed and those in which he will need the co-operation of other officials.

Some Opportunities Open to Philadelphia's Next Mayor

1. Provide that departmental estimates for annual appropriations be prepared and summarized as parts of a clearly defined community program, so formulated that citizens and taxpayers as well as councils may see what is proposed by the administration to meet community needs.

2. Afford full opportunity for discussion by citizens, civic organizations and the press, both before and after the action of councils, of the community program presented in the estimates.

3. Focus the attention of councils, executive officials and citizens upon the annual budget as a whole, as well as in detail, so that it may be looked upon as the embodiment of a definite program to be executed by the administration rather than as a mere aggregation of unrelated appropriation items.

4. Formulate plans which will enable the city to meet each year's expenses out of revenues, instead of financing expenses out of loans or handicapping the city by an accumulating deficit.

5. Devise and carry into effect, with modifications of law if necessary, a plan that will enable the city to make full provision at the beginning of each year for the total estimated expenses of the year, and to fix the tax rate, after such annual financial requirements have been determined, so that this rate will provide the exact amount of the authorized expenditures.

6. Include in the annual financial program of the city definite proposals for public improvements to be financed through loans, so that these may not be confused with current expenses.

7. Include in the city plan a comprehensive program for service affecting health, education, recreation and safety, as well as a constructive plan for material improvements.

8. Invite the co-operation of informed civic and charitable agencies in picturing the community's needs as a basis for formulating the annual budget.

9. Discourage the maintenance of unduly large city deposits in banks, and provide adequate safeguards for city deposits.

10. Assist the controller in every possible way in working out an effective system of accounts and records by which citizens, department heads, and the mayor himself may at all times have prompt, complete and accurate information concerning community needs met or not met, work done or not done, results produced and money spent.

11. Protect and strengthen the city's borrowing credit so that its bonds issued for land and permanent improvements may always be sold at the most favorable rates.

12. Promote the city's trading credit so that supplies, materials and equipment may be purchased to the greatest advantage.

13. Establish exact standards and specifications for supplies and materials to be purchased so that the city's agents and the public alike may know just what has been or is to be bought, at what advantage or disadvantage to the city.

14. Require that the department of supplies be organized and conducted as a highly efficient modern business enterprise, giving to the city the benefit of central buying; to departments the benefit of prompt action; and to dealers the benefit of prompt settlement and businesslike treatment in the city's purchase of \$3,000,000 of supplies annually.

15. Secure independent inspection, by a properly equipped

bureau under the city controller, of materials and supplies furnished to the city; of service rendered; and of construction work in progress.

16. Require the mayor's bureau of contracts and statistics not only to keep the mayor informed concerning the condition or completeness of work, but to study and to report systematically upon methods employed, expense incurred and results obtained; and to report systematically and promptly to city officials information needed for efficient administration.

17. Insist that all city contracts shall be drafted in language that will clearly set forth the respective rights of the contractor and the city; that will make possible little or no change in requirements set forth in the contracts; that will leave as few requirements as possible open to the discretion of department heads; and that will thus encourage the freest competition among bidders.

18. Promote the efficiency of city employees by working out an efficient system of selection, promotion and remuneration; and providing current records of work done and results accomplished that will not only encourage but protect each employee by enabling him to "make a record" for himself.

19. Enforce strictly the present civil service rules, or, so far as they are defective, secure their modification; and provide that the Civil Service Commission shall include in its annual report a complete roster of civil employees.

20. Increase the economy and efficiency in the public service by systematically studying organization, methods and results in each branch of the service, and providing the means whereby the city's business may be directed and controlled with the highest intelligence.

21. Plan for a bureau of licenses in which may be centralized the issue of all licenses and permits which are now handled in seven different offices.

22. Secure the proper publication of department reports; standardizing reports so that they may conform to the highest typographical, statistical and editorial requirements.

23. Extend the scope of the municipal journal "Philadelphia;" utilizing it as a means of bringing currently and promptly before officials, citizens and taxpayers a summary record of accomplishment, of work in progress, and of projected plans of every department of the public service.

24. Maintain a bureau of information in connection with the mayor's office through which citizens shall be encouraged to make inquiries, to submit complaints, and to propose improvements in the public service with assurance of prompt, intelligent and effective attention by the mayor.

25. Call a conference, at least once each year, with responsible city officials of neighboring cities in Pennsylvania, New Jersey and Delaware which affect or are affected by Philadelphia's policies relating to health and sanitation, transit facilities and public improvements.

Both of the candidates responded in practically the same vein, endorsing strongly the program proposed as a basis for municipal efficiency and economy. Three paragraphs from the reply of Mr. Blankenburg's letter show his thorough-going acceptance of the proposals:

"I know of no agency that can be of greater service to the next mayor of Philadelphia than the Bureau of Municipal Research. The interest which this body of men has taken in our municipality has always been a source of gratification to me. Bureaus of municipal research have proved of invaluable service to every city where they have been established; yours should be one of the mainstays of the new administration.

"Definite knowledge of problems and issues that may present themselves should, in my opinion, be gathered from reliable sources so that intelligent action may be possible. We should not undertake more than we can honestly accomplish. If elected, I shall welcome plans and suggestions for a great and better Philadelphia from your body and other organizations, as well as from private citizens; and shall give them not perfunctory, but earnest and effective consideration.

"Publicity is, perhaps, the greatest agent for good. The public is entitled to full knowledge of all the activities of the various city departments; the progress of work under consideration; the expenditures made and still contemplated."

On all sides there are evidences of a changing point of view and a new emphasis in the civic development of Philadelphia. A community program rather than a partisan program is more and more dominating the thought and action of citizens and taxpayers. Admin-

istrative machinery rather than political machines is being recognized as the means through which civic power may most effectively be applied. Intelligent methods of managing municipal activities rather than skillful methods of manipulating personal "pull," are being accepted as the effective means of getting the best out of municipal machinery. The obligations and opportunities of citizens and taxpayers are every day being interpreted in larger terms; and applied not merely to the few intense weeks immediately preceding an election, but to each of the 365 days of four years between elections, when citizens may ask questions, demand evidence, appraise results, and measure cost with specific reference to the administrative machinery and administrative methods employed in the promotion and protection of the community's health, education, recreation, convenience, business and general welfare.

THE CINCINNATI BUREAU OF MUNICIPAL RESEARCH

By RUFUS E. MILES,
Director.

Other than to carry out the general purpose of municipal research, and to apply its methods wherever necessary and possible, the Cincinnati bureau began its work in July, 1909, with no pre-conceived program. Its general purpose, in common with other bureaus, was stated briefly in the following words: "The purpose of the bureau is to conduct an entirely non-partisan study of the methods and work of the several departments of the city government, with a view to recommending such modifications and improvements as it believes to be of advantage; to do whatever it can to promote efficiency and economy of municipal administration; and to furnish citizens with the facts of public business."

As it was obviously impossible for the new bureau, with the limited funds at its disposal, to cover the whole field systematically from the beginning, work was begun with two departments through which to demonstrate the value of municipal research methods. The departments selected were those of Parks and of Health: the former for the purpose of demonstrating improved accounting methods; the latter for the purpose of demonstrating improved organization and service records.

Park Department.—The Park Department study included an investigation of the accounting system, the treatment of pay rolls, the purchase, inspection, storage, and care of supplies, and the collection of miscellaneous income. The fact was disclosed that the department was operating under a disconnected, uncontrolled system of single entry accounts, giving no basis for expense statements and, in several cases, confusing funds one with another in such a way that they could be separated only with difficulty. The department had practically no system of inspection of supplies, and consequently no means of knowing that it was receiving the full value for which it was paying. It had no idea of the quantity of supplies and materials at the storehouse and in the various parks, and had no accounting check on the waste or loss of supplies. It was purchasing in

such small lots that the office work was greatly increased, and the economy resulting from buying supplies and materials in large quantities was almost entirely lost sight of.

A full report, outlining a comprehensive plan of reorganization, was submitted to the Board of Park Commissioners, which thereupon passed the following resolution: "Resolved that the general accounting system as recommended in the communication from the Bureau of Municipal Research . . . be adopted and that the park manager be directed to proceed with its installation. . . ."

The system as installed provides the department with a business system of double entry books such as would be used by a first-class business corporation, and is similar to those already installed and in successful operation in the departments of New York City.

Upon the completion of the installation, the Board of Park Commissioners passed the following further resolution: "The system as installed is accepted and approved, and a vote of thanks extended the Bureau of Municipal Research for their assistance in the work."

Health Department.—The first work undertaken by the bureau in the Health Department was that of revising the methods of record-keeping. The necessity for such a revision will be seen from a few examples. Although it is obvious that no anti-tuberculosis campaign can be intelligently directed unless based on a careful registration system, the department was found to have no registration worthy of the name. No effective methods were employed for following up cases once reported, and, as no effort was made to check up the reporting of cases, there were fewer cases than deaths from tuberculosis reported every year. Similarly, notices served by sanitary officers ordering property owners to comply with sanitary regulations, lay in some instances for months and even a year or more without being enforced. To remedy such defects, the bureau designed a system of records. The tuberculosis registration system was modeled after that in use in the New York City Department of Health, though much simplified. By means of it, the department is now enabled to discover instantly whether a given case has been reported; when; by whom; whether the person is reported to be at home or in the hospital or sanatorium; if at home, whether or not under the care of a private physician; what the home conditions are, etc. If a physician reporting a death from tuberculosis has failed

to report the case when living, he is called upon to explain his failure. In the sanitary records, "tickler" devices were installed which automatically call to the attention of the central office any failure to inspect or reinspect at the proper time. Similar modifications were made in the records relating to general infectious diseases. The general purpose of these recommendations was to place the board and the health officer in possession of the information necessary to intelligent and effective control over their staff.

An investigation of the accounting system in the department led to a report urging the necessity for a reorganization along the lines already followed in the Park Department. The recommendations of the bureau were approved by resolution of the Board of Health, and the new methods installed.

Street Paving.—Before the Cincinnati bureau had been in operation more than a few months, and while the park and health studies were under way, it found a number of questions relating to street paving too urgent to be avoided. Property owners complained of new pavements being laid before they had finished paying the ten-year assessments on the old, which had gone to pieces. There was a general conviction that the pavements were not laid according to specifications, and that the prices were excessive. Nobody, however, seemed able to point out the exact difficulty, and the bureau was urged to investigate the whole subject.

The first inquiry bore upon certain wood block contracts which were being let to high bidders; in four contracts the 26 lowest bids out of a total of 41 were rejected, and the contracts awarded at a total figure of \$44,000 in excess of the lowest bids. The investigation of this practice led the bureau through many technicalities relating to the preservative qualities of various types of the so-called creosote oil used in treating wood paving blocks, the effect of free carbon in various percentages, the methods of testing, the proper distillation requirements, etc. As a result of its investigation, the bureau was brought to the conclusion that the high prices were entirely without warrant, being made possible by ambiguous and faulty specifications. It further appeared that, whether intentional or not, the effect of the specifications was to create a monopoly in wood block, all the contracts for over a year having gone to contractors using the product of the Republic Creosoting Company, of Indianapolis. These facts were presented to the city officials with a recommendation that

no further wood block contracts be let until the specifications had been revised. No attention was paid to this recommendation, and a quarter of a million dollar contract was let soon after at an excess cost of some \$30,000.

The bureau persistently maintained its opposition to the specifications, and its controversy with city officials continued for a considerable period, during which time the following reports were issued: Paving Report No. 1—Wood Block Contracts. Reply of Director Sundmaker to Paving Report No. 1 and Rejoinder of Bureau. Paving Report No. 2—Wood Block Paving: The Reading Road Contract. Paving Report No. 3—Wood Block Paving: Is High-priced Oil a Business Proposition? Paving Report No. 4—Wood Block Paving: Is High-priced Oil a Commercial Proposition? What Manufacturers, Dealers, and Experts say about the Cincinnati Specifications. Paving Report No. 5—What is being done on Reading Road: Reply to Chief Engineer's Communication to Director of Public Service *in re* Bureau's Paving Report No. 5.

Not only did the bureau find the wood block specifications thus defective, but a similar condition was discovered in the requirements for brick pavements. Under all the contracts let for some two years previously, the brick used had been the "20th Century," manufactured by the Fultonham Paving Brick Company. The monopoly seemed to have been primarily due to a clause in the specifications requiring the brick to be between two and a half and three inches wide. Nearly all manufacturers produce a paving brick or block between three and four inches wide, and declare it impracticable to alter their regular size in order to meet a slight demand for a width of less than three inches. It did not appear that the "20th Century" brick possessed especial advantages either in point of quality or in location of plant.

Finally, in March, 1911, after more than a year of controversy, new specifications were adopted by the city, covering all classes of pavements. The new specifications, while not beyond criticism, eliminated the above objectionable features. Other companies were able to compete successfully, and prices were reduced. The second revision, about to be put into effect by a new municipal administration, will reflect to a greater degree the bureau's recommendations. With the new requirements in operation, it is believed that the paving specification issue will have been brought to a close.

Not alone to the specifications was the bureau's attention directed; it also investigated the enforcement of the specifications in actual work. Aided by the contributions of property owners, the bureau placed inspectors on various important streets. A number of violations such as shortage of cement in the concrete mixture, substitution of slag cement for Portland, the use of poor materials, improper laying, etc., were discovered and corrected. In connection with the wood block controversy, the bureau made an effort to inspect the manufacture of wood blocks at the plant; but admission was denied to the bureau by the Republic Creosoting Company.

A sound paving policy requires not only proper specifications, well enforced; it also demands proper selection of pavements, and their replacement at the proper time, reasonably good and continuous repairs being assumed. The bureau has issued a report on the selection of pavements with special reference to economy, and an article by the bureau's engineer in the *Municipal Journal and Engineer* of January 18, 1912, suggests a formula which will be of interest to engineers for determining the proper time of replacement.

The bureau has therefore brought about a thorough revision of all paving specifications, thereby breaking up the monopolies previously existing in wood block and brick paving contracts. Prices, particularly for wood block and granite, have fallen appreciably; and had city officials heeded the bureau's recommendations when first presented, the city would have been the gainer by at least \$30,000. An actual saving of \$30,000 resulted from the enjoining of two contracts, upon evidence developed by the bureau.

Street Lighting.—In connection with the new ten-year street lighting contract, the bureau, in co-operation with several other civic organizations, was directly responsible for the revision of the specifications so as to include, especially, provisions for checking up the service rendered by the contractor, and provisions enabling the city to take advantage of any improvements in lighting methods, as well as provisions reserving to the city power to continue the use of gas if desired. It is believed that the public discussion of the terms of the contract was largely instrumental in reducing the prices, which, based on the approximate existing number of lamps, represent a decreased payment by the city of over \$60,000 a year.

Budget.—One of the conspicuous services of nearly all bureaus of municipal research is that of forcing upon public attention the

importance of the municipal budget. In the spring of 1910, the Cincinnati bureau presented to the mayor three recommendations:

1. That the mayor issue a form of departmental estimate providing for more information.
2. That the estimates of the various departments be made public as soon as received by the mayor.
3. That the mayor arrange one or more public hearings before he finally determined upon his budget.

These recommendations were not adopted in 1910, but when renewed in 1911 were approved by the same mayor. All departments were required to submit their estimates on uniform blanks devised by the bureau, which also provides for comparative data on past budgets and corresponding expenditures. When the estimates were received at his office, the mayor allowed them to be examined by anyone interested; and, before sending his budget to council, held a public hearing for the purpose of having department heads explain their needs and of receiving any suggestions.

This procedure was of value mainly in a preparatory way. Although the blanks were not in all cases completely filled out, the information furnished was much more extensive than formerly, and, in so far as utilized, could not have failed to assist the mayor's office in analyzing the estimates. The public hearing, characterized by the *Times-Star* as "the most representative body of citizenship seen in Cincinnati in many years," indicated a very considerable interest in the subject; and as citizens become better informed on municipal affairs, the opportunity to participate in the framing of the budget is bound to be increasingly taken advantage of. Co-operating with recently elected city officials who took office on January 1, 1912, the bureau conducted an investigation which enabled them to save approximately \$90,000 in the first semi-annual appropriation for 1912.

Classification of Municipal Expenditures.—Closely connected with budgetary procedure is the classification of municipal expenditures. If the city's accounts and financial reports are to show the cost of operating each branch of the various departments and kinds of work carried on, expenditures must be classified so as to set forth each department and kind of work separately, with the expenditures belonging to it. To secure the advantages of comparison, also, the classification of purposes of expenditure should as far as possible be

uniform for all departments, and the names of account headings should be concise and should represent classes of expenditures with well-defined limits.

The present classification of municipal accounts in Cincinnati is similar to that prescribed for all cities of Ohio by the Bureau of Inspection and Supervision of Public Offices, Department of Auditor of State, more generally known as the State Board of Uniform Accounting. Substantially the present classification has been in operation for some ten years; it often renders impossible even an approximate idea of the cost of city work, limits proper control over expenditures, and interferes with intelligent reporting. The Bureau has formulated and submitted recommendations for remedying these difficulties.

Deposit of City Funds.—On November 10, 1910, the Bureau of Municipal Research undertook an investigation of the deposit of city treasury funds to determine primarily how far the city (1) was being protected from loss, and (2) was obtaining the best rates of interest consistent with the necessary protection. A new ordinance, in the drafting of which the Bureau of Municipal Research co-operated with city officials, was passed in February, 1911. The first and more important object of the law has, in the opinion of the bureau, been on the whole well attained. While previously it was left entirely to the discretion of the city treasurer how much and what kind of security should be required, and in what banks and to what amounts the city's funds should be deposited, these points are now definitely provided for by the ordinance.

Higher rates of interest would, in the belief of the bureau, be secured (a) by amending the ordinance so as to provide for separation of active and inactive accounts, and (b) by reducing, if possible, the large cash balance in the city treasury. A term of one year instead of two is also advocated. To secure the first of these changes action by the legislature might be required; action of this kind was taken by the last legislature in reference to the county depository law.

Purchasing.—Under a new purchasing agent, a complete reorganization, largely along lines recommended by the bureau, has been begun of the methods of purchase and inspection of city supplies. All city departments now purchase through the central agency; current price records and files of dealers' catalogues are installed; supplies

are being standardized and bought or contracted for in large quantities, with consequent reduction in prices and greater facility of inspection; central inspection of supplies has already revealed many cases of failure to "deliver the goods." If the rate of saving already exhibited is maintained throughout the department's operations, the result of the current year's work may reasonably be estimated as a saving of upwards of \$100,000.

Other Work.—A considerable number of other studies are in progress at the time of this writing. Among these are

Constructive plans for reorganizing the city's accounting methods, giving the auditor effective control, and centralizing most of the accounting work in his office.

Plans looking toward the amendment of state laws relating to municipal budgets and appropriations.

Efficiency study of the truancy department of the board of education.

Constructive plans outlining the establishment of new methods for caring for the city's dependent and delinquent children, in place of the present city institution known as the House of Refuge.

Co-operation in the reorganization of the Department of Buildings, especially providing for systematic inspection of buildings under construction or alteration, effective follow-up of all violation orders, and real enforcement of the tenement house regulations.

Study of methods of fixing the proportion of cost to be borne by property owners through special assessments, especially in connection with street improvements.

Conclusion.—It hardly needs to be pointed out that the rate of progress in work such as that in which the Bureau of Municipal Research is engaged depends in large measure upon the attitude of public officials. Where ready co-operation and a desire for improved methods are found, results are quickly secured. Where, on the other hand, a sustained opposition is encountered or a disinclination to change is maintained, the results are not as satisfactory and are obtained much more slowly, with greatly increased effort and expense. It is gratifying to the Cincinnati bureau to be able to say that its endeavors to assist the present city officials are welcomed, and with the co-operation now prevailing, a higher standard of municipal efficiency should be established in Cincinnati than has ever existed before.

THE MILWAUKEE BUREAU OF ECONOMY AND EFFICIENCY

BY J. E. TRELEVEN,
Secretary of the Bureau.

New as is the movement to secure efficient government through the application of the principles of business management to municipal affairs, the experience of those who have been engaged in municipal efficiency work has already demonstrated the value of such work. No two groups of investigators have followed exactly the same methods of procedure or have faced the same problems, but each has thrown some light on the causes of inefficiency in local government, and has added something to the ever-increasing knowledge of effective remedies.

The Milwaukee Bureau of Economy and Efficiency is unique among organizations which have been formed for the purpose of investigating municipal methods in that it is a public bureau, created by resolution of the Common Council and financed from the public treasury. The organization of the bureau late in 1910 marked the beginning of general efficiency work undertaken by the municipality itself. Although the bureau is a part of the city government, it is not organized as a division of any of the municipal departments, nor does it constitute a department by itself. It partakes rather of the nature of a special commission which was created to perform a definite piece of work and which, therefore, in its present form at least is a temporary organization.

The first plan proposed for a municipal investigation in Milwaukee provided for a social and economic survey of the city similar to the Pittsburgh Survey. Somewhat later a suggestion was made that cost-keeping systems be installed in the municipal departments. Still later it was proposed that a complete efficiency study of the city government be undertaken. The essential features of these three ideas were combined so that the bureau as created has three principal purposes, viz.: to study the social and economic conditions of the city and make recommendations for betterment; to investigate and improve the organization, accounting, financing, operation, and business practice of the several municipal depart-

ments; and to devise and introduce methods for determining the unit costs of the various operations.

The Common Council selected Professor John R. Commons, of the University of Wisconsin, to direct the work to be undertaken by the bureau and left him free to choose his associates and staff. Professor Commons, whose major interests have been in social work and labor problems, associated with him Dr. B. M. Rastall to direct the efficiency studies. Recently Mr. Leslie S. Everts, who as Deputy Comptroller reorganized the central accounting system of the city, became one of the directors of the bureau. There is a small permanent staff which has been augmented from time to time by the addition of special investigators. A special feature of the organization of the Milwaukee bureau is the consulting staff, which consists of a group of the foremost authorities in the country in accounting, engineering, organization, finance and taxation, sanitation and social work. These consulting experts have assisted in planning the work of the bureau, and have critically reviewed the reports of all investigations made.

From the outset the bureau has had the advantage of the co-operation of individuals and organizations interested in municipal affairs. The position of the bureau as a public body has led the heads of the administrative departments and their subordinates to take advantage of the assistance offered them, and by suggestions and criticism to aid the bureau materially in its work. The state commissions, such as the Railroad Commission of Wisconsin, the Wisconsin Bureau of Labor, the Wisconsin Industrial Commission, the Wisconsin Tax Commission, and the State Board of Public Affairs have given aid in the solution of problems in their respective fields. Such private organizations as the University Settlement, the Consumers' League, and the Wisconsin Anti-Tuberculosis Society have conducted social studies jointly with the bureau.

When the program of work for the bureau was mapped out, the comprehensive social survey at first planned was modified to a series of social studies, each of which should be directly related to some problem of state or municipal administration or legislation, and each of which should result in definite constructive suggestions for the betterment of social conditions. These investigations have been financed entirely aside from the public appropriation for the work of the bureau. Private organizations and citizens interested

in social work have made some of these investigations possible by giving the bureau the services of their trained social workers, and by meeting the necessary expenses of the work. The Bureau of Labor, which was engaged in special research in Milwaukee, gave the Bureau of Economy and Efficiency the authority, and turned over to it the means for completing the work.

The social survey is based on the theory that one measure of the efficiency of government is the extent to which it promotes the welfare of the citizens. Since year by year the scope of the activities of the municipality broadens to include new fields of social service, there is a constantly increasing need of careful study to determine how these social problems can best be solved. The bureau has not by any means exhausted the field of social study, but it has aided the cause of social betterment by suggesting solutions for a number of important problems.

An investigation of the conditions under which newsboys live and work was the basis for the enactment of a regulative law. A study of housing conditions, which showed clearly that present laws were not being enforced, led to the appointment of a special commission to make a comprehensive survey of the field, and to plan remedial measures. Investigations of infant mortality and the milk supply were followed by the appointment of a special committee to study the sanitary and economic aspects of the milk supply. A plan suggested by the bureau for giving free legal aid to indigent persons has not as yet been accepted by any organization. During a period of industrial depression in the spring of 1911, the Merchants and Manufacturers Association maintained a free employment office. The bureau made a study of this office and of other methods of securing employment for those out of work, which resulted in the reorganization of the State Free Employment Office. Investigations of women's wages and of the garnishment of wages were the bases for proposed legislation. As a result of a recreational survey proposed by the bureau and made by the School Board and the Child Welfare Commission jointly, the start has been made toward the logical and systematic development of recreational facilities.

In the efficiency survey the same general lines of procedure have been followed as in similar work in industrial corporations. To present a comprehensive view of the problems to be attacked

and to enable the directors to form their plans so as to secure the maximum results in the time allowed for the work, rapid preliminary surveys of the organization, legal requirements, accounting, and operation of all the city departments were run. These preliminary studies showed that department heads were handicapped in any effort to improve their departments by the lack of proper records and accounts, by antiquated office systems, and by legal provisions which made cumbersome methods necessary.

The organization charts prepared in connection with the preliminary survey showed that the internal organization of the departments was loose and poorly defined, and that in the creation of new positions and the development of new activities no logical plan of organization had been followed, with the result that clearly related activities were often found in widely separated departments. Its knowledge of the activities of all city departments has enabled the bureau to suggest plans for properly co-ordinating and correlating the various activities, to point out opportunities for increased service to the public, and to indicate points at which departmental functions overlap. A general scheme of reorganization has been formulated which has been suggested as the basis for the ultimate complete reorganization of the city government.

At the time the bureau was established, it was planned that during the first year its intensive work should be confined to the Health Department and to the Department of Public Works. The original plan has been followed in general, but at various times investigations have been made outside of these two departments, and some of the studies in the Department of Public Works have not as yet been completed. As the work progressed, standard practices in accounting and business procedure were established and in each study the changes in organization and procedure necessary to secure the highest efficiency were pointed out. It is well understood that the effecting of ideal reorganizations in a municipality is seriously handicapped by budget and legal restrictions. The bureau has, therefore, recommended changes through which an immediate gain in efficiency is possible and has also made recommendations which can be put into effect only as funds become available or legal restrictions are removed.

The reorganization of the Water Works affords probably the most comprehensive illustration of the work of the bureau in the

Department of Public Works. The problems of this department, as brought out by a detailed study of operation, were approached from every possible angle. A water waste survey was made during the summer of 1911 to determine the losses in pumping and in the distribution system and the methods to be followed in eliminating them. An electrolysis survey was made to discover to what extent return currents from the rails of electric railway companies are damaging the underground iron and steel structures in the city. Recommendations made for minimizing this evil are under consideration. Following a study of the present operating efficiency of the Water Works plant, including intake, pumping stations, reservoir, and distribution system, recommendations for improvements to be made in the immediate future were submitted. A second study was made to determine the adequacy of the present plant and to make plans for the future growth of the system to care for the needs of the city twenty years hence. An entire revision of the Water Works as to organization, business practice, accounting, and records, to embrace all of the recommendations set forth in the detailed study and the special surveys has been completed and installed with the exception of such changes as require legislative sanction. Investigations of the completeness of collections and of personal efficiency of the employees of the Water Works have not yet been completed.

Other reorganization studies in the Department of Public Works have either been completed, or are at present in progress, for the Bureaus of Street Construction and Repair, Street Sanitation, Sewers, Bridges and Public Buildings, and City Engineer. The procedure in the general office of the department is likewise being revised. In addition to the general reorganization plans made for these bureaus and offices, special studies have been completed of the refuse incinerator, collection of garbage, collection of ashes and rubbish, procedure in special assessments, and consolidation of house drain and plumbing inspection.

The studies of the bureau in the Health Department embraced all of that department's activities. The preliminary survey brought out the necessity of much detailed investigation and reorganization in order to place the Health Department on a high standard of efficiency. The greatest hindrance to efficient work lay in the faulty organization of the department. There was no definite location of

responsibility among employees, and related activities were scattered throughout the organization. The reorganization plans of the bureau were designed to overcome these defects. Necessary location of responsibility among employees was determined upon, the correct grouping of activities was provided for, the proper functions of each division of the department were indicated, and the necessary system for a complete record of the work performed was designed. Special reports were submitted upon the functions of the Division of Education and Publications, the transfer of out-door nuisance inspection to the Police Department, control and inspection of the milk supply, sanitary inspection, the combatting of communicable diseases, the inspection of food products, and the Health Laboratory.

In addition to its work in the Departments of Public Works and Health, the bureau planned the form of consolidation of the Fire and Police Alarm Systems and installed an office and accounting system in the new department, reorganized the Municipal Reference Library, assisted the Board of Examiners of Stationary Engineers in planning their work, and prepared the defense for the city in an application for the reduction of water rates pending before the Railroad Commission of Wisconsin.

The bureau is now at work on a reorganization of the methods and records of assessment and taxation. The plans for the immediate future include an investigation of purchase methods and standards.

The recommendations of the bureau have at all times been given careful consideration. In general they have been adopted without modification. Some have been adopted in part only, and some few have failed to receive the approval of the department heads or the council.

The bureau has frequently pointed out problems which it has felt could best be solved through the united efforts of interested citizens. To this end it has recommended the creation of commissions, composed of representative citizens without regard to political affiliations, to study special problems and to devise and test means of solving them. Following these suggestions, a market commission, a tuberculosis commission, a housing commission, a child welfare commission, and a special milk committee of the latter commission, have been appointed. The bureau has assisted these

commissions to lay out their plans and has co-operated with them at every stage of the development of their work. It has never been the idea of the bureau that these commissions should be a permanent feature of city government. They have been established to solve definite problems. When satisfactory solutions are reached and the work of the commissions becomes routine operation, they should be discontinued and the work transferred to the proper municipal departments.

Many times it has been possible to make consolidations and reorganizations through which an immediate money saving to the city has been effected. At other times, future savings have been made possible through capital expenditure. While the amount of these savings cannot be accurately estimated, without doubt they are much greater in amount than the cost of the bureau. The bureau has always considered savings as a by-product to efficiency, and at times, notably in the reorganization planned for the Health Department, has not hesitated to recommend increased expenditure to secure the desired efficiency.

The cost-keeping system which the bureau is installing in the various departments is designed to analyze in detail the actual work of a department and to determine costs on the basis of the standard unit of output. The general form and principles of the cost system are the same for all departments. As far as possible, standard forms have been adopted, which are augmented by special forms to suit conditions peculiar to any department. The system has been installed in all departments and bureaus, the activities of which have been studied in detail. The uses of a cost system in a municipality are numerous. Such a system gives the department head accurate knowledge of the work of his department and enables him to control its operations understandingly; it provides a measure of efficiency of employees and equipment; it permits the making of full and complete detailed reports of operation, enabling the department head to analyze the cost of work; it places the departmental accounts on a revenue and expenditure, instead of a receipt and disbursement basis; it makes possible the compilation of reports of municipal expenditures in a form comprehensible to the lay reader; and it permits comparisons of cost through a period of time and with other cities in which similar cost systems may be in use. The bureau has probably made as thorough a study of the problems of

departmental accounting and municipal cost-keeping as has ever been made.

In connection with the cost system a system of departmental accounting is maintained in all departments in which the cost system has been installed. A schedule of accounts has been adopted, which is flexible enough to permit of adaptation to the needs of any department. This schedule is very complete. The Railroad Commission of Wisconsin, which has supervision of the accounts of public utilities, has ordered that the system designed by the bureau for the Water Works be installed and maintained for the trial period of one year. The commission will audit the monthly cost statements of this department. By the terms of a law enacted in 1911, the Wisconsin Tax Commission is given similar supervision over the accounts of the other municipal departments, and the general city accounts, on the initiative of the Common Council.

The bureau has begun the publication of a monthly cost bulletin, which will ultimately contain properly audited cost statistics of each department, analyzed and compared with the costs of previous months. It is hoped that this bulletin, which will report the financial transactions of the city departments in clear and concise form, and in non-technical language, will arouse the interest of the citizens in municipal affairs.

Within the past two years the central accounts of the city kept in the comptroller's office have been thoroughly revised by the deputy comptroller. The budget has been scientifically prepared, property accountability has been established, and the accounting control of the departmental expenditures perfected. The new system in the comptroller's office provides, by a more complete check on the City Treasurer than could be had under the old system, an exact accounting control, by funds, of all expenditures made and obligations incurred. The new system of general accounts in the comptroller's office and the department accounts installed by the bureau have been made to dovetail nicely, and together give a complete record of the city's activities.

The advantages which result to a city by establishing a research bureau as an integral part of the city government are immediately apparent. The department heads are more likely to have confidence in the bureau and co-operate in its work. Investigators are more certain of obtaining free access to all records and accounts, and

securing accurate knowledge of business and operating methods. Recommendations of the bureau are more likely to be given careful consideration.

Organization within the city government, however, is not without its disadvantages. The recommendations of such a bureau may be regarded by the public as coming from partisan motives rather than based on thorough efficiency investigations. Every change of administration endangers the continuance of the work.

A privately financed bureau for the investigation of municipal affairs might feel more free to inform the public of inefficiency in city administration than a bureau organized as a part of the city government. The unsatisfactory feature of the privately financed bureau, however, is the possibility that its recommendations are far less likely to receive consideration at the hands of public officials than the recommendations made by a bureau publicly financed. Thus it can be seen that a private bureau must be satisfied largely with exposing bad conditions and offering suggestions for remedying them, which may or may not receive the consideration they merit, while a public bureau uses the evidences of weaknesses and inefficiency it discovers merely as the basis for constructive recommendations.

Each form of organization has its place. While it may be necessary for some unprejudiced body to give the public exact information regarding municipal affairs, it is equally desirable that somewhere within the city government there be an organization whose function it is to point the way to efficiency by offering constructive methods and suggestions. Private corporations find it profitable to maintain efficiency departments. Surely municipalities with interests many times more diversified stand in as much need of such work as they.

The Bureau of Economy and Efficiency of Milwaukee was created for a definite purpose. When this purpose is fulfilled, the labors of the bureau as at present constituted will be at an end. The need for efficiency work will still continue, however, for it is to be expected that, as time goes on, changes and additions will need to be made to the systems installed by the bureau, and new fields of efficiency study will be opened with the introduction of new municipal activities. Some provision should be made for a permanent efficiency bureau in a department of the city government removed as far as may be from political influences.

PART FOUR

Training for Municipal Efficiency

INVESTIGATIONS AS A MEANS OF SECURING ADMINISTRATIVE EFFICIENCY

BY CHARLES E. MERRIAM,
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Our American cities have been seriously afflicted with corrupt or unrepresentative councils and with dishonest or inefficient administrations. Until recently public interest has centred around efforts to secure honest councils or honest administrators. Only within the last few years has attention been directed to the importance of efficiency as well as honesty in the administration. The general laxity and easy tolerance of politics, the corrupt practices of the political contractor in the field of public works, of the underworld in the department of police, of the public service corporations with reference to agencies of administration charged with their supervision, have combined to make our municipal administrations, generally speaking, highly expensive and inefficient. We are slowly advancing from "gray wolf" dishonesty, to "dub" honesty, from honest incompetency to business efficiency. More attention has been given to the subject of efficient administration in our American cities during the last ten years than in any previous period of our history, and striking results have been obtained in many of our cities. Official commissions like those of Boston and Chicago, Bureaus of Municipal Research in New York, Philadelphia, Cincinnati, wide-awake administrations like those of Philadelphia, Cincinnati, St. Louis and Milwaukee; and commission governed cities like Galveston, Des Moines, and a hundred others, have attacked this problem and have obtained notable results. I have been asked to speak of the work done in Chicago and Cook County.

Six years ago it was my privilege to make for the City Club an inquiry into the municipal revenues of Chicago.¹ At that time there was serious discussion as to whether revenues or expenditures should be taken up, but the lot finally fell upon revenue. In the Charter Convention which met shortly after this, I introduced and secured the passage of a resolution calling for an inquiry by the

¹ City Club Publications, *Municipal Revenues of Chicago*.

council into city expenditures; but no such action was taken. In the second Charter Convention I again introduced and secured the passage of the same resolutions, but with the same result. In 1909 an effort was made by representatives (including the writer) from various clubs to organize a Bureau of Municipal Research for the purpose of inquiring into the expenditures of the city and other local governing bodies; but this effort also was abortive. In the same year I entered the council and in this capacity, as alderman, was able to bring about the investigation.

It so happened that the legislature of 1909 increased the borrowing power of the city by about \$16,000,000, and conditioned the issue of new bonds upon a favorable referendum vote. On the Monday following the signing of this bill, I introduced a resolution calling for comprehensive inquiry into the expenditures of Chicago. I stated that as a referendum vote was soon to be taken upon city bonds, such an investigation was entirely appropriate. If the finances of the city were in good condition, the people should be so informed; and if in bad condition the voters were equally entitled to the information. To vote down the resolution and to pass it were equally dangerous, but it was finally decided to pass it. On June 28, 1909, the ordinance passed as follows:

That the mayor be and he is hereby authorized to appoint a commission of nine persons, of whom not less than three shall be members of the city council, for the purpose of making a comprehensive inquiry into the expenditures of the city of Chicago, and of making appropriate recommendations to the mayor and the city council upon this subject;

That all the heads of departments, and city officials and employees, are directed to supply, on request of said commission, all books, documents, and other information in their possession relevant to the purpose of such inquiry.

The following persons were appointed by the mayor: Aldermen C. E. Merriam, Bernard W. Snow and Nicholas Finn; Walter H. Wilson, City Comptroller; Frank I. Bennett, former chairman of the Finance Committee; Walter Fisher, special traction counsel for the city (now Secretary of the Interior); John W. Alvord, M. Am. Soc. C. E., now president of the Western Society of Engineers; Wm. A. Tilden, David R. Forgan, George Tunell and A. C. Bartlett. The appointment of a representative of labor was agreed upon, but not made. As the originator of the movement, I was elected chairman of the commission; Spurgeon Bell was made secretary. A

steering committee of four was appointed for the purpose of preparing and presenting material to the full commission. This committee consisted of Aldermen Merriam and Snow, Walter Fisher and George Tunell. An appropriation of \$10,000 was made for the work of the commission, and this was later increased by an appropriation of \$50,000. An attempt was made to enjoin the commission from the use of these funds, but Judge Windes declined to grant the injunction.

The work for the commission was done by capable experts and investigators employed for that purpose. The work on the city budget was done by Herbert R. Sands, who had been employed in a similar capacity by the New York Bureau of Municipal Research; on special assessments, by Mr. Dickinson, of Price & Waterhouse, Mr. Peter White, of the New York Bureau of Municipal Research, and Mr. Betak; on sewer cleaning and shale rock, by Benjamin Welton, of the New York office of Commissioner of Accounts; on the Department of Electricity, by W. H. Zimmerman & Co., of Chicago; on water works, by Dabney H. Maury, M. Am. Soc. C. E., president of the American Water Works Association; on street paving, by Samuel Whinery, M. Am. Soc. C. E., one of the best-known paving engineers in the country; on street cleaning, by Richard Fox, head of the Citizens' Street Cleaning Bureau and one of the best authorities on that subject; on the southwest land and lake tunnel, by Mr. Alonzo Z. Hammond; on bridges, by Mr. W. Curtis. Preliminary investigations were followed in most cases by public hearings before the commission, at which opportunity was given for explanation of conditions disclosed by the inquiry, or for obtaining further pertinent information.

The reports of the commission, as soon as completed, were transmitted to the mayor and the council. They were also printed and circulated, with the exception of the reports on water, street cleaning, special assessments, civil service and pensions. Because of the ruling that the life of the commission ended on April 17, 1911, these were not printed by the city, but were printed by the Chicago Bureau of Public Efficiency. In all 21 reports were presented as follows: (1) Budget; (2) purchase of lumber; (3) Lawrence Avenue sewer; (4) purchase of coal; (5) Bureau of Sewers; (6) Bureau of Bridges; (7) City Clerk's office; (8) City Purchasing Agent's office; (9) purchase of castings; (10) Fire Department;

(11) Police Department; (12) Building Department; (13) House of Correction; (14) Department of Electricity; (15) street repairing; (16) street paving; (17) street cleaning; (18) South-west Land and Lake Tunnel; (19) special assessments; (20) civil service; (21) pensions. They may be obtained by applying to the office of City Statistician, Chicago.

City Budget

One of the first pieces of work undertaken by the commission was the revision of the methods of city budget making. Under the old system many of the appropriations had been made in lump sums in such a way as to make effective control of the appropriation impossible. By way of illustration, in the Police Department \$205,000 was appropriated in the 1909 budget under the following title:

For repairs and renewals of wagons and harness, replacement and keep of live stock, identification, police telegraph expenses, rents, repairs and renewals of equipment, hospital service, printing and stationery, secret service, light and heat, and twenty-five more horses and equipment for mounted police and for repair of Hyde Park Station; also other miscellaneous expenses, the sum of \$205,000.

We subdivided this under various heads in the 1910 budget as follows: (1) General supplies; (2) material for repair and replacements by departmental labor; (3) repairs and replacements by contract or open order; (4) apparatus, machinery, vehicles, harness, etc.; (5) purchase of furniture and fittings; (6) purchase of horses; (7) rents; (8) fuel; (9) forage, shoeing and boarding horses; (10) all other operations.

Another illustration may be given from the Bureau of Sewers. In the 1909 appropriation, \$200,000 was appropriated under the following caption:

Cleaning sewers and catch basins, District No. 1, old city wards 1 to 5, 9 to 11, and 16 to 23, inclusive. District No. 2, Town of Lake, wards 29 to 32, inclusive. District No. 3, Town of Hyde Park, wards 6 to 8 and 33, inclusive. District No. 4, Lake View, wards 24 to 28, inclusive. District No. 5, Austin and part of old city wards Nos. 12 to 15, 34 and 35.

This enumeration of districts included all the wards of the City of Chicago, and they might just as well have read "for the City of Chicago, Bureau of Sewers, \$200,000." We subdivided this into a

number of heads in order to ascertain definitely what particular portion of money was appropriated for each purpose, and also to control the fund designated during the entire fiscal year.

We were successful in having the entire budget of the city reorganized on this new basis, giving us the most scientific and up-to-date budget which we have ever had. This method was adopted by the Finance Committee, and the budget was approved by the City Council of Chicago. Accounts were set up corresponding to the different subdivisions of appropriations. The consequence was that last year we had much more effective control over the city finances than ever before.

We also succeeded in making another budget change. For many years it had been customary to appropriate a much larger amount than would be available during the year. These were called "hot air" or "paper" appropriations. They served no useful purpose and were mischievous in their influence on the city's finances. This system placed a premium upon early expenditure of funds by a bureau or department. The chief who carefully conserved his appropriation for supplies or labor might discover in October or November that city funds were exhausted, while the careless head who spent his funds early in the season met with no such disappointment. The inevitable effect was detrimental to economical expenditure.

The action of the commission made it possible to squeeze some of the water out of the city budget, and consequently the temptation to spend departmental funds early in the season was greatly weakened. The effect upon the city's finances was excellent, as it enabled the careful bureaus to follow a policy of thrift and saving without being punished for it at the close of the year. One of the indirect consequences of this work was the defeat of the budget in 1911 because of the fact that it contained an over-appropriation so large that it would have broken down the new system.

Contracts and Purchase

One of the important branches of the commission's work was the investigation of purchases of material and supplies, and the letting and enforcement of city contracts. This involved an examination of the office of the City Purchasing Agent, and of contracts

for material and work in the various departments of the city government, particularly the Department of Public Works.

Purchases of material and supplies for the various departments are made through the City Purchasing Agent's office, when the amount is less than \$500, without a formal contract. Inquiry into the operations of this office disclosed the existence of many serious abuses. One of these was the so-called "split requisition." This is a device for evading the requirement that purchases above \$500 in amount be made by contract. For example, a purchase of \$10,000 is split into sums less than \$500, and no public bidding is required on contract made. In the case of castings, a contract for which bids had been taken by the Department of Public Works was ignored, and material was purchased by split requisitions at a higher figure than the contract called for. This transaction alone cost the city about \$64,000.

It was also discovered that a large miscellaneous business was given to a political brokerage firm whose president was the private secretary of the (then) mayor. This company was upon the favored list and sold a large quantity of miscellaneous articles at high prices to the city. In the case of oils, it was found that prices paid were higher than offered by other companies, and the material furnished uniformly below specifications, as shown by the city's own tests. Purchases of coal, grain, etc., showed similar irregularities, and demonstrated clearly the demoralized and unsystematic condition of the office. The press demanded the resignation of the purchasing agent, but no action was taken. In view of this situation I did not press the commission's ordinance providing for a central purchasing agency, increasing the power and responsibility of the head.

Purchases by contract were carefully examined by the commission. This inquiry covered the drafting of the specifications, the bidding upon the specifications, and the actual enforcement of the terms of the contract. It showed the existence of conditions which were enormously expensive to the taxpayer, and a disgrace to the city. It is unnecessary to discuss these at length, and I shall touch upon them only for the purpose of illustrating particular points.

In the street-repair contracts, declared by our expert, Mr. Samuel Whinery, to be the most openly fraudulent he had ever seen, the chief difficulty was with the specifications and the bidding.

The unbalanced bid was the chief source of trouble. The specifications in this contract provided that "no bid will be accepted which does not contain an adequate or reasonable price for each and every item named in the schedule of prices."

Repairs were divided into two classes: Class A included repairs where any surface and binder were required; Class B included repairs where in addition to surface and binder, a 6-in. Portland cement concrete base was required. The successful contractor bid \$1.75 per sq. yd. for Class A and 1 cent per sq. yd. for Class B. Averaging the bids, the result is 88 cents, and this contractor was accordingly awarded the contract. If, however, the bid of the next lowest company had been accepted, the city would have saved \$147,183, using the estimates on which payment was actually made. These figures were: Class A, \$229,891; Class B, \$12,064. The percentage of Class B to Class A repairs during a series of years is as follows and is very significant:

| | | | |
|-----------|-------|-------------|-------|
| 1903..... | 344.2 | 1906..... | 132.9 |
| 1904..... | 200 | 1907..... | 4.3 |
| 1905..... | 336 | 1908-9..... | 5.2 |

Mr. Whinery estimated that repairs at the intersections of Forty-fourth Avenue, which actually cost \$2,997.91, should have cost \$11.88. Evidently the methods of measurement of areas repaired and the classification of repairs were not calculated to protect the interest of the taxpayer.

In the case of street-paving contracts, the difficulty was double. In the first place, specifications were imperfectly drawn; notably in the case of wood-block specifications, which were so arranged as to invite a monopoly of the business. In the second place, the enforcement of the contract requirements was defective, as the inspection of the work was shown to be grossly inadequate. Case after case of improper work was reported under the very eye of the city inspector, indicating extreme laxity in inspection, and suggesting connivance between certain contractors and inspectors.

In the street lighting contract, providing for 6,000 gasoline lamps, the difficulty was with the inspection. The city did not even possess the "portable photometer" necessary to make the tests, and allowed the contractor a free hand. Our tests showed that instead of a guaranteed candle power of 60, the average was 19 as shown by one set of tests and 26 by the other. No deduction was

made for failure to furnish the light guaranteed and the loss incurred from this cause was estimated at \$85,000.

Shale Rock

In the shale rock case, 23,000 cubic yards of rock excavation, one-fourth of the total excavation, was paid for at \$2 per yard, where borings and tests by the city, by the commission and later by the office of the state's attorney showed clay formation. In this case the inspection of the work was again at fault, as more careful investigation of the quality and quantity of material taken out would have prevented the difficulty which arose.

In the purchase of coal, the typical defects were almost all disclosed. The specifications were antiquated, the system of tests provided was out of date, the enforcement of the tests was lax, while the system of checking bills rendered (in the Fire Department) was inadequate to the point of absurdity. Discrepancies discovered in this connection were of three principal varieties: rejected items, varied items, and inserted items. A case involving all three sorts was disclosed at one fire engine company. On April 24 (under ticket No. 4,847) coal to the amount of 232,200 lbs. was received and entered on the books of the company. This was paid for three times; on the charge of that date, on the repeated charge of May 25, and on the charge of May 29, which include a second repetition of it. Other illustrations of the practice are given in the commission's report on the Fire Department.

The purchase of hose in the Fire Department is an illustration of a different kind. In this case the material, mainly hose, was purchased without any definite specifications, but by the market brand. The brokerage company already mentioned again figures as one of the firms whose brand was acceptable. The specifications of the National Board of Fire Underwriters have since been adopted, with some modifications.

An entirely different class of contract was that unearthed in the House of Correction. We learned that contracts for convict labor are made at the absurdly low rate of 25 cents per day per man in certain cases. It was found that 60 to 100 men are employed at 25 to 35 cents; 60 to 100 at 40 cents; and 60 to 100 at 50 cents. No bids for the services of prisoners have been solicited and there was no competition in awarding the contracts.

The Southwest Land and Lake Tunnel of the water-supply system was another illustration of inadequate inspection service. The investigators of the commission disclosed the fact that the concrete lining of the tunnel was in many instances below the contract requirements as to thickness. Difficulties encountered in Sections 1 and 2 of this tunnel had led to the framing of stringent specifications, but notwithstanding this experience, lax inspection nullified the new specifications. Investigation also showed that the quality of concrete used and the methods of applying it were not such as were called for by the plain provisions of the contract.

These evils may be grouped in a general way as follows: (1) Defects in the specifications themselves, due either to careless continuance of old specifications or to collusion with contractors. (2) Failure to secure wide competition from a number of bidders. (3) Failure to enforce the terms of the contract either because of general inefficiency of inspection or because of collusion with contractors.

Pay Roll and Labor

The commission's investigation covered the efficiency of expenditure for human service in many important departments. The police force and the law department were important exceptions. Special attention was given to the Bureau of Sewers, the Bureau of Streets, the Bureau of Bridges, the water-pumping stations, inspection services in the several departments, and the practical workings of the Civil Service Law.

The first inquiry covered the Bureau of Sewers and was conducted by Mr. Benjamin F. Welton, who had been carrying on similar work in the office of Commissioners of Accounts in New York City. He undertook to test the efficiency of the sewer-cleaning gangs of the city in a series of observations, public and private. His investigators reported to him a deplorable state of affairs in this branch of the city's service. His tables showed that under secret observation the working time of the men was forty per cent and the wasted time forty-six per cent (waiting and unaccounted for constituting the balance), while under open observation their working time was 76.4 per cent and the wasted time 13.8 per cent. He reported that a "fair estimate of the existing pay-roll waste would be not less than sixty-five per cent of the labor pay-roll expenditures."

Testimony subsequently taken before the commission and before the Civil Service Commission confirmed the report of wholesale waste in the work of catch-basin cleaning.

An examination of the water-pumping stations, conducted by Mr. Dabney H. Maury, president of the American Water Works Association, revealed the existence of padded pay rolls. After a thorough investigation of the water-works system he submitted a report on the whole situation, analyzing the conditions as he found them, and presenting constructive recommendations for enforcement of the service. His report showed enormous waste in the operation of the water-works as well as failure to reach proper standards of practical efficiency in service. On the pay roll of the pumping stations, amounting to \$397,862, Mr. Maury recommended reductions amounting to \$75,760 according to one plan, and \$171,242 according to another plan. He recommended changes in the equipment of the stations which would produce an annual saving of about \$140,000; and changes in the purchase of castings which would save \$38,082. With a modern type of hydrant he showed that it would also be possible to save about \$40,000, the cost of annually packing our hydrants with manure for protection against frost.

Mr. Maury also called attention to the fact that in 1905 Chicago was obliged to pay \$1,250,000 extra fire-insurance premiums on account of water-works deficiencies. His report also called attention to the enormous waste of water actually pumped. This amounts to about sixty-six per cent of the total pumpage. It is estimated that thirty-three per cent of the water pumped is lost before it reaches the consumer, and thirty-three per cent is lost by leaky fixtures and otherwise after reaching the consumer. Mr. Maury also called attention to the wide discrepancy between the test duties of the engines at the pumping stations and the station duties as reported. With few exceptions these engines are all of types that should give test duties running from 100,000,000 to 180,000,000 ft.-lbs. for 1,000 lbs. of steam. The average station duty is below 79,000,000 ft.-lbs.

Examination of the Division of Bridges and Harbors by Mr. Walter H. Curtis showed similar results. His report states, for example, that the painting of bridge houses cost about five to seven times a reasonable price. Observations and estimates on other

work done in this division showed a loss of about fifty per cent in efficiency as measured by ordinary standards. As one of our investigators reported, referring to certain men, "they expressed their opinion freely of the commission, but that they did not care what was found in the report, as they were safe under their boss, who had instructed them to continue their work in their usual way, and not sweat blood." In the harbor section of this division it was reported that half of the pay-roll expense could be eliminated, amounting to \$7,640.

One of the most important reports submitted to the commission was that made by Mr. Richard T. Fox on the Bureau of Streets. Our investigators were at first refused access to the bureau records by the acting superintendent, but facilities for investigation were afforded later. One of the striking features of this report was the evidence of lack of standardization of work. For example, one street sweeper cleans 10,970 sq. yds. of asphalt in good condition, with a horse traffic of 351 in eight hours. Another cleans 15,190 sq. yds. in similar condition with a horse traffic of 699. Another sweeper cleaned 14,920 sq. yds. of brick in poor condition with a horse traffic of 1,406, while another cleaned 9,500 yds. in good condition with a horse traffic of only 495.

Investigation of street sweepers' work showed (after all necessary and reasonable allowances) a loss of twelve per cent in time. This amounts to about \$120,000 a year. Much of the time put in, however, was not properly employed. Investigators' reports show that forty per cent neglected their work to a very noticeable extent.

The time lost by the garbage teams observed was 22.5 per cent, a loss to the city, as calculated by Mr. Fox, of about \$70,000 a year. The ash teams lost in time, 13.7 per cent, or the equivalent of about \$70,000 a year. These teams are one of the last big things left in the way of political patronage, and naturally it is difficult to secure economy under such conditions. Between June, 1907, and March, 1910, seventy-one per cent of the teams in service were replaced, obviously for political reasons. Mr. Fox submitted detailed and important recommendations regarding the reorganization of the whole service.

In the Department of Electricity, the gas-lighting service maintained by the city was found to be in poor condition. Of 956 mantle gas lamps inspected, only sixty-two per cent were in condition which

could be called passable. The following table indicates the results found.

INSPECTION OF GAS LAMPS IN CHICAGO.

| | | |
|-------------------|-----|-------|
| Good..... | 173 | 20.2% |
| Fair..... | 350 | 40.7% |
| Bad..... | 229 | 26.7% |
| Very bad..... | 82 | 9.69% |
| Out..... | 24 | 2.8% |
| No chimney..... | 62 | 7.2% |
| Broken glass..... | 36 | 4.2% |

Our expert reported that "It is highly probable that the light in case of mantle and open flame lights could be increased fifty per cent should the proper care for which the city is paying be given the lamps."

Lax Administration of the Building Department

The inquiry into the Building Department revealed the existence of serious disorganization and widespread demoralization of the service. The system of records was found to be incomplete, the inspection of buildings, elevators and fire escapes in many instances ineffective, the prosecution of violations of ordinances open to severe criticism. In 147 suits filed during thirteen months, only seven convictions were secured. Thirty-eight cases had been continued five or more times, and 121 cases continued from one to thirteen times before final disposition. The commissioner himself, when examined, was unable to describe in even a general way the manner in which several of the important functions of this department were administered, and showed an utter lack of familiarity with his department.

The commission, in its report, declared: "Your commission is of the opinion that the present commissioner of buildings is incompetent to longer hold his office."

Reference has already been made to the inadequacy of the inspection service in connection with the enforcement of contract provisions. In all inspection services, whether the inspector deals with supplies and material, or with the enforcement of contract provisions, as to method of performing work, the city is likely, as shown by our investigation, to receive less than full value for the money expended. The possibility of collusion with contractors,

and the general atmosphere of political influence make vigorous and effective inspection difficult. The diligent and impartial inspector is likely to make trouble for himself, and incurs a serious danger of removal or transfer; or he may fail to secure deserved promotion; or he may be subjected to the process of making it unpleasant for him—a step which is intended to get rid of the offender. It is clear that where a contractor is influential with the department or the administration, great pressure is brought to bear upon the inspector to relax his vigilance. The effect of this in the long run is to produce a demoralized condition in the entire service.

Special Assessments

Investigation of the special assessment accounting work of the city by Mr. Dickinson, president of Price, Waterhouse & Co., assisted by Mr. T. W. Betak, showed a considerable duplication of work. It appeared that men in the Board of Local Improvements, the comptroller's office and the collector's office were carrying accounts which were in some instances duplicates, and which need not be carried more than once under a proper system. It was estimated that approximately \$25,000 might be saved if the accounting system in these departments were reorganized.

Civil Service Methods

The commission's inquiry also covered the practical operations of the merit system. This was one of the first inquiries made into the real workings of a municipal civil service system, and developed facts of great importance not only to Chicago, but also to other cities operating under similar systems.

This inquiry did not cover comprehensively such aspects of the operation of the system as are not matters of record. In order to make the work complete, additional funds would have been necessary and investigators trained to do detective work. Even with these important limitations, the investigation was thorough-going enough to give a fair idea of the present workings of the system and to serve as a basis for recommendations as to changes.

In certain respects, important advances have been made recently in the workings of the merit system. This is particularly true of the system of regrading positions in accordance with the duties of the respective offices, as described in detail in the report

of the commission's investigators. The effort of the recent commission to standardize the requirements of examinations, and the methods of making them as well, is distinctly creditable. The establishment of the Efficiency Division since the beginning of the commission's investigation is an important step in the direction of high standards of public service.

In other important particulars, however, there was found to be room for immediate improvements. The present system of advertising Civil Service examinations fails to provide for proper publicity, and, in this way, limits the field of applicants, especially for the higher positions. As shown by the statements in the investigator's report, there is a dearth of candidates for many important places, which can be accounted for by a general lack of information regarding the examinations. This is a serious restriction upon the merit system, and, until some method of providing adequate publicity for these examinations is found, the opportunities for public service remain practically unknown to the average citizen.

The practice of sixty-day appointments is also a matter of very great importance. While many of these appointments are made for perfectly legitimate reasons, in other cases this does not seem to be true. To the extent that these preliminary appointments are made on a political basis, and for the purpose of providing information and experience to be used in a subsequent examination, it is clear that the purpose of the merit system is defeated.

Favoritism Not Eliminated

The conduct of the examinations for certain offices does not reflect credit on the commission appointed and paid for the purpose of maintaining merit as distinguished from political favoritism. The most conspicuous case of this character is found in the selection of the city statistician, who obtained a mark of 50 on a simple examination in arithmetic. The method in which certain positions in the Bureau of Engineering and the place of city architect were filled is of the same general nature.

In the case of labor service, the situation is distinctly discreditable. The appointments in this division, instead of being on a merit basis, are, in the main, very plainly political. The observance of a number of solemn forms in this connection by no means adds to the dignity of the Civil Service system of Chicago. That laborers

should be led to present themselves at the commission's office, or physician's office for physical examination, and, later, upon notification, go to the ward superintendent's office in search of a position, when, as a matter of fact, the appointment is determined by political recommendation, is extremely unfortunate. Day laborers ought not to be invited or permitted to spend their time and money searching for positions which it is wholly unlikely they will ever secure.

The fact is, that by various acts the Civil Service Commission has created a general idea that appointment and promotion in the city service are not wholly based on the merits of the individual candidate, but depend to a very considerable extent upon political influence. The city employee is likely to get the idea that his best hope for advancement in the city's service lies in the strength of his political backing, rather than the faithfulness and efficiency of his performance of his official duties. Whether or not this is wholly true or applicable in a large percentage of cases, if the impression prevails that it is true, the effect is about as injurious to the city service as if it really were the case. This idea can be dispelled only by such unmistakable action on the part of the commission as will make it absolutely clear that that commission stands for the thorough-going application of the merit system in all cases.

City Pension Systems

A unique feature of the commission's work was an inquiry into the city's pension system. The different pension plans were analyzed with a view to possible improvement in conditions. It was found that none of the funds had ever been carefully examined by an actuary, and all are more or less guess-work. The statutes governing the funds are defective in many particulars, notably in respect to refunds. In the case of firemen and policemen no refund whatever is provided. The administration of these funds by several boards is complex, cumbersome and expensive. Some form of consolidation would save time and money for the pensioners and the city.

An illustration of this was found in the case of the police pension fund. The commission's inquiry showed that, although this fund amounted to about \$600,000, no interest was received from it. It was also found that an attorney for the board was paid \$5,000 a year for his services, although this work was formerly performed

by the staff of the corporation counsel's office. The bond of the treasurer was fixed at \$40,000, and no outside audit of accounts was made by an independent firm.

The investigator for the commission recommended the adoption by the city of a superannuation system to cover all employees. The present annual expenditure of the city for pension purposes is about \$700,000, and the additional cost is roughly estimated at \$400,000, or on a contributory basis, about \$200,000. A considerable number of men now carried on the pay rolls are in effect "pensioners." These are persons who have long been in the service, and are wholly or partly incapacitated for the active performance of their duties, but are carried at full pay. Their retirement on half pay would have strengthened the service and been a decided economy for the city.

Entirely aside from the humanitarian considerations involved, it would improve the efficiency of the service, if a pension were made to cover all employees. The practice of large private corporations indicates that business motives alone justify the adoption of the pension system. Such plans have already been put into practical effect by London, Paris, Berlin, and other large municipalities, and it can only be a question of time until the same step is taken by Chicago.

Results Secured

The results accomplished by the work of the commission were substantial and important, although short of what might have been obtained with proper backing.

The segregated budget system, which was adopted, gave the city more complete control over expenditures, and in this way made possible great economies, especially in connection with the other work of the commission.

Other immediate results were the relief of the public from the payment of about \$10,000 a year in fees formerly the perquisite of the city clerk. The Police Pension Fund Board was reorganized, and interest amounting to about \$25,000 a year was added to the fund, while a suit for payment of back interest was instituted. During the investigation the pay roll of the water pumping stations was reduced to the extent of \$35,000, a new engineer was placed in charge of the stations, and an effort made to reorganize the system.

As a result of the commission's recommendation, the Commis-

sioner of Public Works and the Deputy Commissioner resigned and were replaced by more efficient men. The Superintendent of Sewers was discharged by the Civil Service Commission, and his place filled by a more capable man, Mr. Hill, of the Board of Local Improvements. The Superintendent of Dumps was discharged by the Civil Service Commission. The recommendations of the commission in respect to the City Purchasing Agent and the Commissioner of Buildings were, however, wholly ineffective.

The amount of work done in the various departments materially increased under the stimulus of the inquiry. This was particularly noticeable in the Department of Public Works, where the greatest wastes were found, and where there was consequently the greatest opportunity for improvement.

The improvement in city contracts was general. In practically every department old specifications were reconsidered and revised, and their enforcement somewhat more carefully looked after. A noticeable instance of this was the coal contracts, which were brought up to date, purchases being made on the British Thermal Unit Plan, and the enforcement of specifications being carefully guarded. The enormous frauds and waste in connection with the purchase of coal were checked, and large sums saved to the city. The price of castings was cut in two, resulting in an annual saving on this item alone of \$25,000.

Hay and grain specifications were revised and placed upon a different basis. In the Fire Department competition has been introduced for the first time in twenty years, and the quality of the materials delivered was substantially improved. The system of purchasing hose in the same department was also revised to conform to the specifications suggested by the National Board of Fire Underwriters.

The gasoline lighting contract in the Department of Electricity was revised and more attention given to inspection; with the result that for a time at least lights were kept up to the standard set by the contract.

Under the stimulus of the investigation the contract with the Drainage Board for use of its electric power for lighting purpose (which contract had been mysteriously lagging for several years) was suddenly completed. This arrangement will add 10,000 new lights to the city's equipment at a cost of only twenty per cent more

than is now paid for over 12,000 lights. The transfer of the Thirty-ninth Street, Lawrence Avenue, and Wilmette pumping stations to the Sanitary District is another illustration of the same tendency to activity under the influence of the commission inquiry.

Paving specifications were revised by the Board of Local Improvements to some extent, although by no means to the degree recommended by Mr. Whinery. An additional force of inspectors was added to the staff of the Board of Local Improvements, with a view of securing more faithful performance of contract obligations. It is doubtful, however, whether this additional number very materially improved the situation. Although business methods of the Police Department were found in better condition than anywhere else, Chief Steward made a vigorous and successful effort to improve the system still further.

As a result of the frauds disclosed in purchase of coal, the auditing of bills was transferred to the comptroller's office, and provision made for central audit in that department. This will, at any rate, prevent the careless kind of an audit made by the retired officers in the Fire Department, and should ensure more careful and expert scrutiny of bills against the city.

After the commission began an inquiry into the rates of interest received by the city upon the public funds, the comptroller discovered that he could secure one-quarter to one-half of one per cent more in the way of interest than he had previously received. The rate was raised from two per cent to an average of $2\frac{1}{4}$ per cent, thus increasing the revenue of the city by about \$50,000 a year. A bill authorizing the investment of city funds in anticipation of tax warrants was also prepared and has just been passed. This will make possible an annual saving of about \$200,000.

An indirect result of the activity of the commission was the establishment of the Efficiency Division in the Civil Service Commission. This bureau was organized for the purpose of studying conditions in the several departments, and of making suggestions for improvement. If this work were carefully and impartially conducted and adequately supported, it would effect important changes in the city service.

On the other hand, important changes suggested by the commission were not made, as they could have been with the sincere and earnest co-operation of the administration in our work. After

demoralized conditions were disclosed in the City Purchasing Agent's office, the head of the department was permitted to remain undisturbed. In spite of the deplorable and dangerous conditions revealed in the Department of Buildings, the head of that department was not relieved of his grave responsibilities. Had the recommendations of the commission been vigorously taken up by the city government and an aggressive policy pursued, much more sweeping changes might have been made, to the great benefit of the taxpayer and the public. In individual cases where such co-operation was secured, progress made was rapid and marked.

When the 1911 budget was presented to the council, I presented amendments which would have reduced the pay-roll obligations of the city about \$100,000 per year. These were voted down, however, and the superfluous positions were continued at the expense of the public.

Criminal Prosecutions

Over criminal prosecution the commission had no control. The commission had no power to compel the attendance and testimony of witnesses, excepting city employees; or to compel the production of books, documents, and papers, other than those of the city. The commission had no power to prosecute anyone, or to begin a civil suit. It was purely an advisory body, entirely dependent upon the city and the county for the execution of its recommendations. All of the commission's material was given promptly to the state attorney for Cook County. A stenographic copy of all hearings was sent to that officer. At many of the hearings a representative of the state attorney was present, at my request, and all evidence or clues that might in any way assist the course of criminal justice were presented. The chairman and the attorney for the commission consulted with the state's attorney, our investigations were used before the Grand Jury, and otherwise no step left untried to bring the guilty to punishment. The indifferent handling of the cases by the state attorney's office produced indictments, but no convictions.

Sources of Loss

From the observations made in the various bureaus and departments, it is clear that a great gain could be made in most classes of city expenditures under proper management. With a properly

selected purchasing agent, careful attention to the letting of contracts and their enforcement, and with careful organization and supervision of the working force of the city, very material economy could be effected.

The three great sources of loss disclosed are outright graft or stealing, political favoritism, and lack of proper system. The dividing line between these three is not always clearly marked and they very often shade into each other. It is an easy step from a lax system to political favoritism, and it is an easy step from political favoritism to plain graft. Lack of system fosters political favoritism and graft, and at the same time political favoritism stands in the way of proper methods of organization and supervision. We may say that if graft and politics were eliminated the introduction of business methods would be comparatively easy; and on the other hand we may say that with a proper type of system, both political favoritism and theft would be made more difficult. Eliminate these three great types of waste, establish the principle of absolute integrity and efficiency, drive out politics from the administrative departments, emphasize the importance of economy and efficiency, and the taxpayer's dollar would go much farther than it now does.

An important problem barely started by the commission was that of departmental reorganization. At present the number of departments is so great, and their work so badly organized that the resulting loss in economy and efficiency is great. As things now stand, there are more independent heads of departments in Chicago than there are in the government of the United States. A simpler form of organization could undoubtedly be worked out to the very great advantage of the administration and the city. One of the chief advantages of the commission form of government has been the definiteness with which power and responsibility may be located. So far as the administration is concerned, many of these advantages might be gained by simplifying the organization of the several bureaus and departments and by more careful co-ordination of their work.

Chicago Bureau of Public Efficiency

The Chicago Bureau of Public Efficiency was organized in 1910 to continue the work of the commission on city expenditures, with

reference to the city government, and to extend the investigation into the three park districts, the County, the Sanitary District, the Board of Education and the Public Library Board, none of which is under the jurisdiction of the city government. Mr. Julius Rosenwald was made president of the Board of Trustees, Mr. Herbert R. Sands, director, and George C. Sikes, secretary. Numerous reports have been made by this body, the most important of which are those covering the park system of Chicago, and several of the county offices.

These county reports are of especial value, not only locally, but generally, as few investigations of this kind have been made. It is probable that many of the weaknesses disclosed in the administration of Cook County are typical and characteristic of county government generally. The grewsome system of graft and waste found in the office of coroner, the padded pay rolls and antiquated methods of the Circuit and Superior Court clerks, the conditions in the sheriff's office contain much of interest and value to other counties. On the other hand, the report commendatory of the office of Recorder, and the description of methods employed there, may hold suggestions of importance for other counties.

The indirect results of fixing the attention of the community on the subject of efficient administration are striking. In the city government we erected a permanent efficiency division under the Civil Service Commission. Under the influence of the general indignation at waste of public funds, the civil service law was extended to cover the park system of Chicago and the Cook County service. In each of the three park systems and in Cook County an efficiency division has been established, and the work of reorganizing and systematizing has been begun, although by no means completed. Budget systems, contracts, accounting methods and pay rolls have received an overhauling in the last three years such as they have never known in the history of the city. The people and their officials have come to think more clearly and to move more swiftly in the direction of economy and efficiency than at any other period in our municipal life.

Importance of Continued Investigation

The value of persistent effort in the direction of economical and efficient administration is shown by some of the work done by

this bureau. For example, one of the reports of the commission on city expenditures showed the urgent need for an electrolytical survey, but no action was taken. The bureau published another report on this subject calling attention to the previous one, and to present conditions, and as a result the city undertook the survey. One of the reports of the commission on city expenditures showed that the city's specifications for wood block paving were so drawn as to invite monopoly, with higher prices and poorer pavement. No action having been taken, the bureau issued a supplementary report again calling attention to these facts; and this time a modification of the specifications was secured. A report of the commission called attention to the defective and expensive system of repairing asphalt pavements. No adequate action was obtained, and the bureau made another investigation of the conditions, suggesting that the city consider whether it would not be better policy to make asphalt repairs itself. In the last city budget, an appropriation was made for a municipal asphalt repairing plant.

It is true that results are not always secured even on a second report, but frequently they are. In any event, continuous attention on the part of some competent agency to any branch of public administration provides a support for the official who is trying to serve the public, and is a standing menace to the corrupt or incompetent. Hitherto the one steady and persistent force has been that of some private or political interest. It is just as important to uphold and protect the honest and capable official, as it is to punish the dishonest and weed out the incompetent. Many of the important results we have accomplished locally have come as a result of the action of officials who have hitherto lacked "support" in their desire to improve the service. Men naturally prefer to head an efficient bureau or department rather than an inefficient one, and if political or private pressure is removed or counteracted, they will take a degree of pride in the public work entrusted to their charge.

One of the most significant hearings before the commission on city expenditures was that in which a high city official showed how suggestion after suggestion of his had been blocked by political or other influences, until finally he had become utterly discouraged and had ceased to put forth his energies aggressively for the im-

provement of the service. His case is only typical of others here and elsewhere.

The steady work of these agencies of investigation is slowly raising the standards of service in our municipalities. They are educating the taxpayer and citizen to watch where his dollar goes. They are turning the spotlight on graft; they are making political favoritism unprofitable politically; they are directing public officials to the task of overhauling antiquated, lax and wasteful methods; they are helping to make city government an efficient instrument in the service of the community.

A NATIONAL FUND FOR PROMOTING EFFICIENT MUNICIPAL ACCOUNTING AND REPORTING

BY U. L. LEONHAUSER, C. P. A.,
Secretary of the Fund.

When Herman A. Metz assumed the office of comptroller of New York City a few years ago, he was shocked at the archaic methods employed in transacting public business, in recording transactions, and for currently showing the financial position of the city. Having built up a large private business of his own and knowing, therefore, from first-hand study, the importance of efficient methods, the lack of business methods in the city government was all the more glaring to him. About this time the Bureau of Municipal Research began taking an active part in investigating the city's business methods. As a result of its studies, with expert advice, it framed definite suggestions as to how the city's business and accounting methods could be improved so as to bring them into line with accepted standards in well-conducted private business. The Bureau submitted its suggestions to Mr. Metz, as comptroller, who eagerly embraced this opportunity for correcting the chaotic condition of the comptroller's office. By doing so he started a movement for efficient business practice, still in operation, which is permeating every nook and corner of New York City's departments, to the profound astonishment of many wiseacres who said the thing could not be done.

So impressed was Mr. Metz with the need for modern municipal accounting and business methods, which he knew must be nation-wide that, upon finishing his term as comptroller, he conceived the idea of establishing a fund for carrying on a campaign of co-operation along these lines in other American cities. Correspondence was entered into with a number of city comptrollers throughout the country. He found that his plan met the hearty approval of these officials. He thereupon established the National Fund for Promoting Efficient Municipal Accounting and Reporting, endowing it with \$10,000 a year for three years. The administration of the fund was placed in the hands of the Bureau of Municipal

Research, because this agency was already in touch with city officials throughout the country.

This fund, now generally known as the "Metz Fund," seeks to make available to American cities the best principles and practices worked out in municipal accounting; to assist officials who find themselves in the plight in which Mr. Metz found himself when he became comptroller of New York City, by showing how they may establish efficient accounting and business methods; and to answer questions concerning municipal accounting and other problems. In short, to show how, when city officials have the will, to adopt in municipal business the kind of accounting systems and business methods which are in use in efficient private business.

In addition to publishing current bulletins calculated to arouse interest in and to emphasize the need for better accounting methods, and to answering questions submitted by city officials and private citizens in various parts of the country, the fund is developing a literature on municipal accounting, a field which up to this time has scarcely been touched. It is publishing a series of "Short Talks on Municipal Accounting and Reporting," one number of which appears each month, seven numbers having thus far been distributed.

Talk No. 1 contains a discussion of municipal revenue and expense accounts, what they are and what they are not, why they are necessary, with a concrete illustration of a revenue and expense statement and an illustration of the kind of a statement that usually passes for a revenue and expense statement. Talk No. 2 discusses a balance sheet or statement of assets and liabilities of the general account, how it is developed and why it is necessary. It contains illustrations of the right and wrong kind of balance sheets, and statements of surplus or deficit account. Talk No. 3 deals with fund accounts, tells how they are developed, why they are necessary; contains concrete illustration of fund balance sheet, and of a summary consolidated balance sheet. Talk No. 4 deals with the capital account balance sheet showing the capital assets and liabilities of a city; shows why these accounts are best exhibited in a separate statement from current assets and liabilities; explains depreciation, capital surplus, assessment accounts, etc.; and gives concrete illustration of a capital account balance sheet. Talk No. 5 explains the correct treatment of sinking fund accounts and trust fund accounts. Talk No. 6 deals with functional expense and cost

accounts; explains the underlying principles of classification and points out some prevailing misconceptions of the purpose of classification; explains the value of functional and job costs, and of accounts of work performed, both being necessary for ascertaining unit costs; and Talk No. 7 explains a scientific method of collecting and controlling municipal revenues, describes the kinds of documents and method of audit; contains illustrations of forms of reports to treasurer and financial officer and forms of new triplicate tax bill adopted by New York City. When completed the "Talks" will be published¹ in book form.

One of the vital needs of almost every municipality in the country, and, for that matter, of every state government in the country, is a scientific method of budget-making, in other words a scheme for determining how much money should be appropriated and how the appropriations shall be apportioned among the activities of the city and the objects of expenditure, in order to make certain that money will be spent for the purposes for which appropriated and no other.

The Metz Fund, in recognition of this need, has undertaken the preparation of a handbook on the subject which it hopes to make available to every city and state in the country. This book, which is now in preparation, will cover every phase of the subject of budget-making.

Information regarding present methods of budget-making has been obtained from over fifty cities and will be incorporated in the manual in a comparative statement. Another subject which is engaging the attention of citizens who desire to make municipal business more efficient is that of scientific purchasing and standardization of supplies and materials. This subject will be dealt with in detail in a book which the Metz Fund plans to publish in the near future. For the purposes of ascertaining the steps taken by commission government to improve city administration the fund conducted a comparative field study of ten typical commission cities in which the practice of commission government was carefully analyzed. The results of the study are now in preparation for publication. Where city officials desire to consult with the experts of the fund in their own cities so that the subject of conference may be close at hand, such service is made available at cost.

¹ D. Appleton & Co., Publishers.

TRAINING MEN AND WOMEN FOR PUBLIC SERVICE

BY WILLIAM H. ALLEN, PH.D.,

Joint Director of the New York Bureau of Municipal Research and of
The Training School for Public Service.

When in 1909 effort was made to interest Mr. E. H. Harriman in the nation-wide need for municipal research, conditions in Philadelphia, Cincinnati, St. Louis, St. Paul, etc., were cited. Mr. Harriman replied, "This is not the time to think about St. Louis, St. Paul, Cincinnati and Philadelphia. We have been trying out the municipal research method in New York. We must first make that demonstration absolutely convincing. Whatever succeeds in New York will succeed in any other city, and then is the time to consider the extension of the municipal research method to all parts of the country."

When in 1910 Mrs. E. H. Harriman was told of requests for men to apply to a score of localities at local expense, the methods which had been convincingly demonstrated in Greater New York, she asked: "Will you not need soon a training school to ensure that the supply of men able to do what communities want shall keep up with the demands for more efficient government?"

The National Training School for Public Service, now being conducted by the New York Bureau of Municipal Research, is therefore grounded in five necessities: (1) The need for efficiency in government methods; (2) the need for efficient agencies to lead communities and to apply scientific methods to government; (3) the need for slow but convincing application of efficiency methods to public business; (4) the nation wide awakening to the need for both efficient methods and efficient agents; and (5) the need for accelerating the supply through a national training school.

After her first question in January, 1910, Mrs. Harriman asked frequently for facts bearing upon the New York demonstration and upon the out-of-New-York interest in that demonstration. From the fall of 1910 to the spring of 1911 she asked one group after another of business and professional men the following questions:

1. Do you think efficiency of public business might be increased by any kind of training in advance of election or appointment to office?

2. Do you think efficiency of volunteer bodies, such as bureaus of municipal research, boards of trade, city clubs, etc., might be increased if there were available men trained to analyze the methods and results of public business and make constructive suggestions?

3. Do you think training for the study and administration of public business can be given best through university lectures or through field work?

4. Does municipal research with the sympathy and co-operation of the city administration in New York—which has already been promised by the mayor, comptroller, commissioner of accounts, presidents of Manhattan and board of aldermen, etc.—afford a suitable laboratory for such training?

5. Is the time ripe to begin such training?

She began with the then trustees of the Bureau of Municipal Research: R. Fulton Cutting, Bradley Martin, Jr., Victor Morawetz, John B. Pine, Henry L. Pritchett, Albert Shaw, Edwin R. A. Seligman, Frank Tucker and F. A. Vanderlip. She next asked a number of educators: Professor L. S. Rowe, president of the American Academy of Political and Social Science; President Humphreys, of Stevens Institute; President Hadley, of Yale; President David Starr Jordan, of Leland Stanford University; Professor Charles Zueblin, and Dr. Talcott Williams, the recently elected head of Columbia's School of Journalism; Professor Marion Parris, of Bryn Mawr. Thirdly, men in governmental positions were asked: Governor Wilson, Justice Hughes, Mayor Gaynor, Comptroller Prendergast, President McAneny, President Mitchel, Commissioner of Accounts Fosdick. The answers from these persons, experienced in efficiency tests for private business, public business and education, have been printed in the *Announcement* which will probably be found by readers of *THE ANNALS* in their local library. They were unanimous in believing that, in addition to all that the universities, colleges and technical schools could do, field training was needed and the time was ripe to begin.

The question was then raised with a number of business men of New York, Chicago, Cleveland, and Cincinnati who were in posi-

tion not only to understand these needs but, if convinced, to contribute toward the founding and support of such a training school.

After questions, explanations and conferences the Training School for Public Service was announced on November 13, 1911, with the following as founders: George F. Baker, August Belmont, George Blumenthal, William P. Bonbright & Co., H. M. Byllesby, Andrew Carnegie, C. A. Coffin, Cleveland H. Dodge, M. Hartley Dodge, James Douglas, Robert Goelet, Mrs. E. H. Harriman, J. W. Harriman, Edwin Hawley, Myron T. Herrick, W. M. V. Hoffman, Samuel Insull, Otto H. Kahn, Adolph Lewisohn, Samuel A. Lewisohn, Clarence H. Mackay, J. P. Morgan, Frank A. Munsey, Stephen S. Palmer, M. J. Perry, George W. Perkins, Henry Phipps, John D. Rockefeller, Jacob H. Schiff, Mortimer L. Schiff, J. G. Schmidlapp, Howard C. Smith, Robert M. Thompson, Cornelius Vanderbilt, Felix M. Warburg.

The training school is conducted by the New York Bureau of Municipal Research and its men are assigned to tasks side by side with regular staff members.

The point of view of those who are now supporting and conducting the training school is well represented by an epigrammatic sentence from a letter by Dr. Marion Parris, of Bryn Mawr: "Students don't dare squint at a microbe with less than three years' graduate biology. Yet we turn people loose on the social fabric without any other doctorate than a kind heart." The kind heart referred to is, of course, frequently supplemented with the doctrines of political pull or personal ambition.

The aims of the training school were stated by the founders as follows:

To train men for the study and administration of public business.

To qualify men to meet the growing need for students and administrators competent (a) to test and (b) to improve methods and results of municipal service.

To publish facts which may be incorporated in text-books and lectures in teaching the relation to the public service of (a) political science, government and sociology; (b) accountancy; (c) engineering; (d) law; (e) public hygiene; (f) school administration; (g) journalism; (h) medicine, etc.

To furnish wherever practicable a connecting link between

schools and colleges and municipal or other public departments for practical field work.

To secure open discussion of public business which will emphasize the need for training on the part of officials and employees alike.

Men in training will be taught by doing and helping to do, not by listening. They must, through actual field work, equip themselves to learn whether and how time sheets are kept; how service records are installed; how efficiency tests are applied; how city contracts are enforced; how goods purchased and construction processes are inspected; how public hearings are conducted; how civic bodies may influence official action; how current and annual reports are prepared; how school children are examined for physical defects; how milk stations are conducted; how street cleaning, street gangs, clerks, etc., are tested; how salaries, grades and supplies are standardized; how efficiency of school work is tested and improved; how charters are studied, drafted, explained; how budget estimates are prepared, based on past experience and proved future needs, analyzed, studied, explained.

For example, New York City has decided to establish a municipal reference library as part of the New York public library. After conference with Dr. John S. Billings, director of the New York public library, one of the training school men is obtaining facts which will help in the organization of a municipal reference library and insure that the first documents put into that library are of a kind most certain to be of use to city officials in their current work. He has made an inventory of the books heretofore considered indispensable for the various division heads in the borough of Manhattan, department of water supply, etc. He has analyzed the reports made by engineers and other experts to the Board of Estimate and Apportionment preparatory to the voting of funds, and noted (a) what bibliographical data were consulted in the preparation of these reports; (b) what additional material was available but not used; (c) what further material should have been available and consulted if the city was to reach its conclusion in the full light of its own experience and the best experience of other cities.

Two former school superintendents and a former Bureau worker are making a study of the Wisconsin school system, particularly the

rural schools. Their report will deal with such subjects as curriculum, instruction in agriculture, salaries, cost of supplies and plant, attendance forms of records, etc. That theirs is really field training may be gathered from a letter just received: "The demands of this work cause one to live a rather strenuous existence. . . . Yesterday morning I took a train at 3.30 a. m., rode until six, drove into the country and returned at 12.15 this morning. It is not always as bad as this, but traveling in the frontier country is difficult. But there are many compensations."

A former health officer is working out plans for current cumulative health returns particularly as to transmissible diseases, with the aim of making it easy for health officers to keep before themselves statistical and graphic showing of where the problem lies in controlling infection.

Every man in training must have first hand contact with health and school problems and handling vouchers, warrants, budget estimates, etc.

Stipends of from zero to \$3,000 are being paid men in training. These stipends are not salaries but bridges, to enable men to get over from one specialty to the general practice of leadership in municipal business. No stipend is paid men just out of college.¹

During the summer of 1912 special work will be conducted for school men wishing to supplement their previous training by a field study of the machinery and procedure of various departments in New York City. That is the season when New York prepares its budget and all summer students will be given at least a short course in preparation, analysis and explanation of budget estimates.

The opportunities for this form of training are as widespread as the need for efficient public service. The founders of the National Training School for Public Service had in mind at the outset that whatever merit there might be in training through doing would be enhanced in direct proportion to the necessity for doing the work which the student is to study. There may be expected to be hundreds of thousands of young men and women, some of them in high schools, some of them in colleges, others in technical schools, who will be learning the science of government and practicing the science of government in their own localities from one end of the country

¹Further information will be gladly sent upon request to Training School for Public Service, 261 Broadway.

to the other. The time will certainly come when engineering schools will expect every graduate to have had field experience in municipal or other public engineering; when medical schools will expect every graduate to have had field experience in municipal or other public medicine; when lawyers will be required to know and to have applied administrative law to their immediate localities; when college and high school graduates will not be considered equipped for the duties of citizenship until they have had field experience in government methods. As men are trained to do public business efficiently and as others are trained to require the efficient doing of public business, even political parties will see that it is to their interest to utilize men able to do jobs well.

NOTES AND DISCUSSIONS

RELIGION'S REPLY TO ECONOMICS

The capitalistic system of industry is under fire. The attack is being pressed on many sides, but mainly from two conspicuous points of vantage.

In the first place, capitalism is being assailed from the standpoint of efficiency. Its production of wealth is wasteful both of natural and human resources; and its distribution of the product on the basis of service rendered falls short of justice. The principle of competition has broken down. Instead of a delicately balanced system working automatically and without friction and disorder, the industrial world holds together only because of the necessary intrusion of such artificial elements as organized capital, organized labor, political regulation, and social ownership.

In the second place, capitalism is being attacked from the side of morals and religion. The system of private ownership and wage-labor is not only inefficient, but inhumane and materialistic. Its cruelty is seen in such commonplace accompaniments of its activity as child-labor, sweat-shops, tenements and slums, unsanitary factories, unguarded machinery, industrial accidents and diseases, twelve-hour days and seven-day weeks of labor; conditions which have been established or bettered within recent years, mainly by the interference and command of the people, acting through the instrumentalities of democratic government. Nor need I enlarge upon the materialism fostered by our modern industrial life. If one were to try to invent a system, says Prof. Rauschenbusch, in his "Christianity and the Social Crisis," which should foster covetousness to the highest degree, one could not improve upon our present order of things. Capitalism stands indicted before the bar of religion because it is at bottom selfish, and selfishness is the essence of sin.

At a time when capitalism is thus condemned from the sides both of efficiency and of morals, it is not surprising perhaps that there are few to-day so mean as to do the system reverence. Now and then, however, a valiant voice is lifted; and such a voice do we have in Prof. Carver's able and effective little book, entitled "The Religion Worth Having."¹ Essaying to answer the specific question, "Is religion of any use?" and thus to enter the religious field for the first time, the author soon finds himself back upon his old familiar economic stamping ground, and his book, therefore, becomes nothing more or less than a challenge to the two-fold criticism of capitalism which I have outlined above. Life, to Prof. Carver, is fundamentally a struggle, first a struggle "among social groups," and, secondly, a struggle among the individuals in each group, "modified, controlled and directed so as to promote the efficiency of the group in its inter-group struggle." The object of this struggle is the "control over the forces of nature;" and, "through this control, of course, "dominion over the rest of mankind as mankind has . . . dominion over the rest of the animal creation." This object will be

¹Carver, T. N., *The Religion Worth Having*, pp. vii, 140. Price, \$1.00. New York: Macmillan Company, 1911.

attained by that "group which so regulates the struggle between its individuals as to secure the largest measure of success to those who strengthen the group most, and to bring poverty, failure or punishment to those who strengthen it least." Those "strengthen the group most" who have the largest fund of productive energy and the largest measure of productive efficiency. These men can be best discovered by the open struggle within the group of "economic competition," just as the best runners can be discovered by a race. Capitalism, in other words, is not only a nice test of the individuals, but it is at the same time a certain means of "getting the economic resources of the nation into the hands of those who can handle them most productively," and of bringing "failure and poverty to those unfortunate individuals who are not worth their keep!" It is the parable of the Talents all over again—"to him that hath shall be given, and from him that hath not shall be taken away even that which he hath."

Here is Prof. Carver's answer to the charge that capitalism is inefficient. It is obviously a reassertion in the baldest terms of the old economic individualism of the Manchester School. "The genius has never arisen," he says, "who could even suggest a way of distributing the wealth or the places of responsibility in a nation without a struggle of one kind or another as a test." It would be interesting to pause here and question the validity of such a restatement as this of the old political economy. We should like to ask if the existing inequalities of wealth, and of the ownership and control of the resources of nations, are commensurate in any sense with the productive energy and efficiency of the individuals concerned? We should like to inquire if artificial monopolies, special privileges, and industrial despotisms are not the inevitable accompaniments of such a struggle, and if the attempt to eliminate these extraneous factors in the situation by social control is not itself the very beginning of the end of that "economic competition" which the Professor lauds so highly? We should like to debate the problem of that poverty, for which, as Dr. Devine puts it in his "Misery and Its Causes," "the individual who suffers is not responsible, but which is not beyond the control of society." We should like to ask if the figures of the army, which Prof. Carver uses with such approval, are not the perfect picture of the socialized as contrasted with the individualistic group, wherein all competition between the individuals, composing the group, for purely individual ends, is eliminated, in favor of a rigorous co-operative enterprise for the social ends. We should like to question the Professor's cynical distrust of democracy, his utter lack of sympathy with the aspirations of labor, his contemptuous consignment of the poor to the rubbish heap, as those who have not "met the economic test of performance" and are therefore "not worth their keep." Especially should we like nothing better than to compare this statement of the old philosophy of individualism with the new philosophy of socialization as forecasted, if not actually set forth and justified, by Prof. Taussig's remarkable "Principles of Political Economy." But for all this we have no space. We must be content with pointing out that Prof. Carver has answered the charge that capitalism is inefficient by reaffirming the old principle of "economic competition," and is far from convincing in his statement.

Of more immediate concern to us is the author's answer to the second charge, that capitalism is immoral and irreligious—un-Christian, we might add—which

constitutes the real burden of his message. Prof. Carver meets this indictment by redefining religion in terms of his political economy. "That is the best religion," he says "which (1) acts most powerfully as a spur to energy, and (2) ~~directs~~ that energy most productively." "The religion worth having," he says in ~~another~~ place, "is the religion which will enable its adherents to be fruitful and multiply and people the earth and subdue it and have dominion over it." "The religion worth having is the religion which enables the people and nations which adopt it to survive in competition with peoples and nations possessing any other gift of religion. The religion is not worth having which brings failure in this physical and practical sense, which would unfit for the struggle for dominion the peoples and nations which adopt it, and cause them to succumb to the superior surviving power of other peoples." The gospel of religion, in other words, is the "work-bench" gospel, which fosters productive energy; and the great sin against which such a gospel must be directed is that of the pig-trough, which tempts men to enjoy rather than to produce. The true church is "the Fellowship of the Productive Life;" and that this church will be separated from the masses is "a normal and economic result," since "people with such a religion could scarcely help prospering out of proportion to peoples who waste their energies in sin and dissipation." "This aspect of the separation of the church from the masses," says Prof. Carver, "is displeasing to those who are beaten, and their natural resource is talk, muck-raking and palaver."

That this statement is one of amazing interest and value goes without saying. Here we have a perfectly frank and unblushing attempt to define the religion of capitalism not in the strange terms of a theology but in its own familiar terms of political economy. And that this definition sounds suspiciously like the promise of Satan when he revealed to Christ "the kingdoms of the world and all the glory of them" is not perhaps surprising. Here, it seems to me, we have a more impressive proof of the essentially irreligious character of the competitive system of industry, and its utter incompatibility with the religion of Jesus, than can be found in any of the writings of those who are out-and-out opponents of the whole business. Here is a religion which sees nothing more in the individual than a worker whose business it is to produce, and then use the surplus of his ~~production~~ "for further productive achievement, for a further conquest of the forces of nature and an extension of dominion over the world." Here is a religion which ~~defines~~ success in human living as a production of a surplus of material things ~~over and~~ above what is "necessary to sustain life," and a failure in human living as the production of merely enough for personal sustenance, or less.

Prof. Carver's religion, in short, knows nothing in the teaching of Jesus but the parable of the Talents, and finds in this the summation of the Christian gospel! It is a religion which fosters the prejudice of rank, the pride of class, and all the stupid pretensions of political and industrial aristocracy—a religion of the strong, the unscrupulous, the proud. But that it is a "religion worth having," or, in the last analysis, any religion at all, I would steadfastly deny. Religion has to do ultimately with spiritual and not material things, or rather it has to do with material things only as they affect the spiritual realities of life, which is of course very nearly. Religion is interested not in a man's material success, but in his spiritual integrity. Religion can be quite content if a man fails to gain any

part of the world, if only he saves his own soul. Religion does not stop with the parable of the Talents, but passes on to other and higher truths which sprinkle the gospel pages from Matthew 1 to John 23. Religion believes that the work-bench philosophy is sound and good, so far as it goes; but it believes that above and beyond this is the family or home philosophy, which represents men, not so much as toilers competing at the work-bench, as brothers in a home, living in the ideal of "from each according to his ability, to each according to his need." Religion, let me emphasize again, must be as practical as Prof. Carver would have it. It must concern itself very immediately with the world in all its industrial and political phases. But this it must do, not for the purpose of capturing and controlling the world as it is, but rather for the purpose of remaking it, reforming it, refashioning it, after the heart's desire, that the bodies of men may not be bruised, and the souls of men destroyed. What true religion wants is not dominion for the sake of further conquest, but dominion only for the sake of soul-emancipation. Men must be free to realize the divine possibilities of their beings. They must be free to grow and aspire and love.

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BOOK DEPARTMENT

NOTES.

Bailey, L. H. *The Farm and Garden Rule Book.* Pp. xxiv, 587. Price, \$2.00. New York: Macmillan Company, 1911.

As the name implies, this is a manual giving in briefest terms information on all subjects likely to be of interest to the agriculturist. Would you learn the number of plants, set one inch apart, it takes to fill an acre or the grading of roses or stock, "just look in the book and see." The wide sale of the three earlier editions is the best indication of its value.

Barker, D. A. *Cash and Credit.* Pp. vi, 143. Price, 40 cents. New York: G. P. Putnam's Sons.

In this day of cheap primers on scientific subjects—cheap in quality but not in price when one considers their real value—it is a pleasure to find a primer like this one of Mr. Barker's, which is accurate and substantial in its exposition of principles, and evinces a knowledge of the work-a-day world in its explanation of their application. The book discusses such subjects as the relation of money, credit, and confidence to prices; the theory and practice of the domestic and foreign exchanges—a subject upon which the book is particularly strong; and the principles and practice of banking. Illustrations and descriptive material have reference principally to the British money market.

The book is open to a few criticisms, but most of them are not serious. In his treatment of the price equation (pp. 19-20) Mr. Barker omits any reference to the important subject of the rates of monetary and of deposit turnover; his explanation of the gold exchange standard is one-sided, being based especially upon the practice in India, which differs very materially from the typical gold exchange standard. There are minor inaccuracies in the reference to the Philippines (p. 86), that to Mexico (p. 87), and that to the United States (p. 123).

All in all, however, Mr. Barker's book is an excellent primer, and well worth reading by any one who desires a brief but substantial survey of the principles of money and credit as exemplified in the British money market.

Beard, C. A. and Schultz, B. E. *Documents on the State-wide Initiative, Referendum and Recall.* Pp. viii, 394. Price, \$2.00. New York: Macmillan Company, 1912.

This is an excellent collection of source material. The volume includes all of the constitutional amendments providing for a state-wide system of initiative, referendum or recall now in force, several of the most significant statutes elaborating constitutional provisions, all of the constitutional amendments now pending adoption, six important judicial decisions, certain materials relative to state-wide recall, and some illustrative papers showing the system

in ordinary municipalities and commission-governed cities. In the appendix is the complete scheme of government suggested by Hon. W. S. U'Ren and others of Oregon, and also the ballot titles for the Oregon election of 1910. In order that students of government may have accessible the source materials needed for the study of these movements, the compilers have promised to issue new additions from time to time as important constitutional amendments or statutes are enacted.

In the introductory note of sixty-nine pages Professor Beard gives the history of the adoption of these measures, showing that they are subjects of great practical consideration for all students of government and men of affairs. He analyzes succinctly and comments favorably upon the significance of each of the movements.

The volume is well indexed. As a collection of documentary material it has the rare merit of being exhaustive. It is a valuable and timely book of reference.

Bergson, Henri. *Creative Evolution.* Pp. xv, 407. Price, \$2.50. New York: Henry Holt & Co., 1911.

The title of this book attracts attention, and this attention is held by the style of the author, even though this is a translation. Professor Bergson is one of the most known of present French philosophers, and there are many who will welcome this English version.

In essence, the author believes that the human mind is bound to attempt a philosophy of the universe that shall utilize the newer discoveries of the ways of natures. Science must interpret the changes of matter in order that it may control matter. Philosophy must go further back. M. Bergson at the outset specially emphasizes the role that the concept of duration, time, now plays and must play in science. Indeed, this part of his discussion is perhaps the most valuable contribution he makes.

Neither mechanism, which is so characteristic of science, nor finality, dominant in the older philosophy, can now be accepted as satisfactory. In their places the author seeks refuge in a vague conception of some vital force which works in creative fashion, time being as essential a feature as form.

The development of modern sciences (particularly the biological), is discussed, and then the various systems of philosophy are reviewed. The discussion is always interesting, the criticism often searching. In the reviewer's opinion, there is no good reason for accepting the by no means infrequent dogmatic utterances on vexed questions as final, but the argument as a whole will repay careful study.

Blair, Emma H. *The Indian Tribes of the Upper Mississippi Valley and Region of the Great Lakes.* Pp. 784. Price, \$10.00. Cleveland: A. H. Clark Company, 1912.

Bloomfield, Max. *The Vocational Guidance of Youth.* Pp. xiii, 124. Price, 60 cents. Boston: Houghton, Mifflin Company, 1911.

The school prepares, in a measure, for life, but the specialization of modern

industry has placed before the average student such a bewildering maze of choices that some effort must be made to direct the youth into the most desirable forms of employment. Hence, Mr. Bloomfield and those working with him have organized vocational guidance bureaus, both in the schools and in connection with social agencies outside of the schools. As a result of this activity, "common action has become more easy; social insight and the will to serve have increased." In clear, readable form, the author has explained the system of vocational guidance, detailing its advantages to the child and the society at large.

Campbell, G. L. *Industrial Accidents and their Compensation.* Pp. xii, 105. Price, \$1.00. Boston: Houghton, Mifflin Company, 1911.

In an essay covering slightly less than one hundred pages, the author has attempted to sum up the problem of accident compensation. The first portion, dealing with the statistics of industrial accidents and their social causes, is notably incomplete in its failure to discriminate between the superficial work done by the average State Labor Bureau and such excellent studies of Industrial Accidents as those made by Miss Crystal Eastman in Pittsburgh and the Minnesota Bureau of Labor in 1908. The author is either ignorant of or else he fails to recognize the incompetency which frequently shows itself in factory inspection and labor statistics departments.

The remainder of the work, which deals with accident compensation, includes a discussion of voluntary agencies of Employers' Liability Laws in the United States, and of Employer's Liability Insurance. The book ends with a chapter on Suggested Reforms. Not only has the author failed to grasp the full social significance of the accident problem, but his citation of remedies is distinctly below the standard of similar work done by Miss Eastman for the Pittsburgh *Survey* or for the New York Commission on Employers' Liability.

Clark, Sue A., and Wyatt, Edith. *Making Both Ends Meet.* Pp. xiii, 270. Price, \$1.50. New York: Macmillan Company, 1911.

"Making Both Ends Meet" consists in large part of the economic records of self-supporting women living away from home in New York. The data were collected through the National Consumers' League. Mrs. Sue A. Clark conducted the inquiry for a year and a half, obtaining the workers' budgets, as they were available, from young women who were interviewed in their rooms, boarding-places, and hotels, as well as at night-schools and clubs. Edith Wyatt supplemented these accounts and rearranged them. The book is not entirely the work of these two, however, and recognition is given of the help of the other contributors.

The unstandardized conditions in the work of women, generally, really form the chief topic of the book. Trade legislation backed by conscientious inspection and powerful enforcement is concluded to be the most effectual method of reform.

The method of presenting the material is extremely interesting, usually following the narrative form. In short, it is well worth the perusal of any

one desiring information on the subject without the laborious task of wading through statistics.

Clay, A. *Syndicalism and Labor*. Pp. xv, 230. Price, \$2.25. New York: E. P. Dutton & Co., 1911.

This work is a polemic against the radicalism so prominent in the labor movement of to-day. Beginning with a discussion of the origin and meaning of the term "syndicalism" and of the place of syndicalism as a weapon of industrial warfare, the author traces the development of the movement in France, Italy, Spain and the United Kingdom. Interest centers, of course, in the last named country, and the main purpose of the volume seems to be that of arousing public attention to the danger of allowing the trade unions and the movement for social reform to become pawns in the game of furthering socialistic designs. The trade unions seem to be abandoning the old policy of conciliation and collective bargaining for a policy of class struggle and class aggrandizement. The new unionism is merely collectivism under another name; and "social reform" has become a label for a variety of schemes out of which the state socialists make much political capital. This has been inevitable in the march of progress, but it has led the country "to a position in which political and social conditions combine to menace the stability of the system of social organization under whose aegis that progress has been made." The middle classes should pause to consider the state to which humane sentiment is leading them. They must be brought to realize their situation and to take an attitude that will not be misinterpreted as "an encouragement to those who advocate violence and intimidation as the most effectual method of securing the redistribution of wealth."

Bias marks the whole treatment. The author seems to have a morbid eye for anything that can be labelled socialistic; and he assumes a sort of divine monopoly over progressive tendencies on the part of the middle classes. But for all that, the working out of the argument is so intelligent that it cannot be dismissed in cavalier fashion.

Crampton, H. E. *The Doctrine of Evolution—Its Basis and Scope*. Pp. 312. Price, \$1.50. New York: Columbia University Press, 1911.

This book was not written for students of social science, but for students of biology. Nevertheless, it is the best book yet published for those who wish to see what biology has to offer as a basis of or supplement to social studies. The author avoids the technical terminology that makes scientific books so difficult. He has a unique power of keeping in view the essential principles and of pointing out their application to related subjects. The first half treats of evolution as a process. It is the sort of biology that every one should know. The latter half treats of man and his social evolution. This is, of course, the difficult part, but the work has been done so successfully that all can learn from it and few will be inclined to find fault. If he occasionally overstates the influence of the biologic factors in social evolution, the correctives are readily at hand for the economist and sociologist to supplement this view with their own. No one interested in social science should miss

this rare opportunity to broaden his view and gain a better appreciation of the ways of nature.

Dean, M. B. *Municipal Bonds Held Void*. Pp. 122. Price, \$2.50. New York: By the Author, 1911.

This work is stated by the author to be "a compilation of all cases in the United States holding municipal bonds void or determining their illegality prior to issuance, enjoining their issue, denying registration or *recognition*, or refusing their validation."

It is intended for use by owners and dealers in municipal bonds and banks loaning on such securities as collateral, as a check against the illegal issues which are at the present time "floating around the country like derelicts upon a sea." The work is, in reality, a digest of the various cases coming to the author's attention bearing upon illegal municipal bond issues. A feature of the work is three tables, giving the names, amounts and character of the bonds declared illegal or whose issue was enjoined, the purposes for which they were issued and other matters of a kindred nature.

Der Ling, Princess. *Two Years in the Forbidden City*. Pp. ix, 382. Price, \$2.00. New York: Moffat, Yard & Co., 1911.

Devine, Edward T. *The Spirit of Social Work*. Pp. xi, 231. Price, \$1.00. New York: Charities Publication Committee, 1911.

One of the best known social workers in the United States has sought to present in this volume his conception of the spirit of social work. In nine addresses, dealing with the Conservation of Human Life, Housing, Woman Suffrage, Criminality, Poverty, and Philanthropy he presents once more his unfaltering belief in men and his firm conviction that a *remodeled* environment will relieve most of the maladjustments from which society now suffers. The work, which is clear and forceful, should appeal to the widening circle of readers who are interesting themselves in the problem of social work.

Dodd, W. E. *Statesmen of the Old South*. Pp. ix, 242. Price, \$1.50. New York: Macmillan Company, 1911.

This little volume, the subtitle of which is, "From Radicalism to Conservative Revolt," will go far to confirm Professor Dodd's right to be called a keen analyst of American history. Only three statesmen are dealt with, Jefferson, Calhoun, and Davis, though others are necessarily given some attention because of their relation to these. Jefferson is presented in a light which will be pleasing to the "insurgent" of to-day. Not only was he an "insurgent" in 1776, when he proposed, but did not effect, the democratization of Virginia, but such he remained, and the same proposition he offered again in 1816. He failed because the "interests" were too strong. We can only wish that Professor Dodd had dwelt a little more on Jefferson as President. Calhoun was always a nationalist at heart, especially when the Presidency seemed within his grasp, but he put property *interests* above nationalism and democracy and the kind of property he championed must

look to the states for protection. Jefferson Davis was his disciple and, much against his will, thinks Professor Dodd, was driven to revolt in behalf of the "interests."

Edler, Friedrich. *The Dutch Republic and the American Revolution.* Pp. viii, 244. Baltimore: The Johns Hopkins Press, 1911.

Dr. Edler has done an excellent piece of historical research, though he would have made his study more valuable had he placed greater emphasis upon its economic and financial aspects. And his work would have had more general interest had he put it in a more attractive literary form. His purpose was to treat his subject primarily and largely from the diplomatic point of view and with all possible fullness of detail; and he has achieved his purpose of making a scientific treatment of a subject slightly known and appreciated in the United States.

He has considered the many phases of politics in the United Provinces during the period of the American Revolution. He has made it unmistakably clear that the Dutch rendered very important aid to the Americans, though in an indirect and clandestine manner, and though almost wholly for the sake of Dutch commercial interests. The Dutch were at the beginning of the war between England and the American provinces nominally neutral; by its end they were openly the allies of the Americans and the enemies of the British. Throughout the war, they were especially eager to obtain a large share of their trade. The agents of the American provinces and of France made use of the United Provinces for many secret negotiations. In many ways the Dutch rendered aid to the Americans and the French, though by the terms of the treaty of peace between England and the Americans the Dutch were made the victims.

Franck, H. A. *Four Months Afoot in Spain.* Pp. 370. Price, \$2.00. New York: Century Company, 1911.

Here is a book that is different from the ordinary book of travel. With only \$172 to cover all expenses, the author goes by steerage to Gibraltar, making the trip through Spain on foot and by third-class rail. He departs from the usual line of travel and visits places unknown to the ordinary tourist. His knowledge of the Spanish language and his wonderful adaptability make it possible for him to mingle with the lower classes as one of them. He makes friends with tramps and peasants, eating their food and living as they live.

The book does not attempt to give any great amount of real information. It is just an easily flowing and, often, humorous account of his care-free wanderings. He gives interesting glimpses of life in Spain, especially among the peasants,—their attitude toward church and State. Like other travelers, the author condemns the profligacy of the priesthood, but he sees little to disapprove of in the bull fights.

Altogether, the book is unusual and is delightfully interesting. It compares favorably with the author's earlier work, "A Vagabond's Journey Around the World."

Garner, James W. *Government in the United States.* Pp. 416. Price, \$1.00.

New York: American Book Company, 1911.

This is a text-book designed primarily for use in high schools and academies. The book happily begins with a discussion of local government. From local government it proceeds to discuss in an inclusive manner the machinery first of state then of national government. More than the usual amount of attention is devoted to the actual operation of governmental machinery. For this reason the book will undoubtedly go far toward meeting the constantly increasing demand for a text for secondary schools that will emphasize the personal relation existing between the citizen and his government. It may be questioned, however, whether the book goes far enough in this direction. To be sure suggestive chapters are devoted to interesting discussions of suffrage and elections; political parties and nominating methods; citizenship, and organization and procedure of Congress, but is it not high time that secondary students be taught something as to law-creating as well as to law-making forces? Certainly at least one chapter might have been devoted to the formation and expression of public opinion and the means by which legislative and administrative bodies are actually influenced.

From the standpoint of pedagogy the book is entirely satisfactory. The type is clear; the arrangement is excellent; the subject matter is well proportioned; it is written with clearness of diction. At the close of each chapter is a list of references and a list of questions through which the student may be taught the value and use of documentary material. The questions will also serve as a point of departure for the discussion of interesting and pressing governmental problems of the day. In the appendix are copies of the Articles of Confederation and of the Federal Constitution.

Garrett, G. *Where the Money Grows.* Pp. ii, 66. Price, 50 cents. New

York: Harper & Brothers, 1911.

This collection of short sketches, descriptive of Wall Street and of the habits of those who frequent it, has less value in book form than in the pages of a daily paper, for which some of the sketches are very appropriate. The two entitled "The Way of a Client" and "Taking Trouble Home" are the best.

Hackwood, E. W. *Good Cheer.* Pp. 424. Price, \$2.50. New York: Sturgis & Walton Company, 1911.

The Romance of Food and Feasting, the secondary title of this book, gives a much better idea of its contents than its general title. A wealth of material gathered from a great variety of sources is presented. A few of the thirty-seven topics discussed are: Culinary Art the Mainspring of Civilization, Foods and Culinary Practices of the Ancients, Forks and Refinement, The Roast Beef of Old England, The Cook and his Art, National Foods and National Prejudices, Influence of Diet on National Character, Curiosities of Diet, The Aesthetics of the Dinner Table. The materials are presented topically and without any semblance of scientific arrangement or logical development. It is

neither a history nor a scientific treatise, and one must search diligently through the chapter analyses to find specific manners and customs of various peoples. The index is of no assistance in this pursuit except as to items of food and a few general subjects. The student of gastronomy, however, will find it interesting and entertaining. It is rich in quotations (without references) and is profusely illustrated.

Hard, William. *The Women of To-morrow.* Pp. xi, 211. Price, \$1.50. New York: Baker & Taylor Company, 1911.

Among the books which have recently appeared dealing with the question of women and their modern revolt against traditional dependence, the present work stands out, sharply marked off from the others by its brilliant, easy style and its broad grasp of the fundamental principles underlying the woman movement. Mr. Hard in his present volume has contributed not a little to the available material on one of the most vital modern social problems.

Herrick, C. A. *Reclaiming a Commonwealth and Other Essays.* Pp. viii, 201. Price, \$1.00. Philadelphia: John J. McVey, 1911.

Under the above title Dr. Herrick has put forth a volume of essays on educational topics that will command the serious attention of educators and of the thinking public generally. Of special interest are the ones on *Reclaiming a Commonwealth*, in which Dr. Herrick narrates dramatically the struggle to raise North Carolina from illiteracy and utter lack of educational ideals to a creditable position among American commonwealths; on *Education the Keystone of Power*, and *Old and New Education*, wherein are clearly described certain educational ideals and tendencies; and on *Unconscious Education*, which discusses in delightful fashion the qualities essential to the true teacher, and the rich rewards of the spirit which come to the man who devotes himself unreservedly to the training and development of youth.

The other essays are of a more practical sort, and while adding to the reader's storehouse of facts make less contribution to his mental furniture.

This little volume is an admirable one for the odd minutes that are too precious to be wasted and too few consecutively to be used for more exhaustive discussions.

Hicks, F. C. *Competitive and Monopoly Price.* Pp. 39. Cincinnati: University of Cincinnati, 1911.

The viewpoint of this discussion proceeds from fairly well accepted premises in current theory, and its development contains little that is new. The conclusion reached seems to be a compromise such as would preserve the valuable elements both in competition and in combination. The following is the author's summary of guiding principles:

"1. Fair price can be secured only by securing the proper balancing* of competition and unity of action. No policy can hope for success which regards competition as natural and beneficial in and for itself and unity of action as abnormal and injurious.

"2. Since, under modern industry, the healthy balancing of competition and unity of action cannot be attained through the spontaneous working of

business interests, there must be legislation, and this legislation must have for its object, not the impossible régime of free competition, but the proper adjustment of both competition and unity of action.

"3. Mere general provisions as to acts that are in restraint of trade are not sufficient. The dividing line between acts which in their ultimate effect do and those which do not restrain trade is altogether too indefinite to suit the needs of business. The specific evils shown by experience to result from excessive unity of action and from excessive competition should be clearly defined and explicitly forbidden, so that both the general public and those who manage industry may know just what is and what is not contrary to law."

Jacques, Mabel. *District Nursing.* Pp. xiv, 162. Price, \$1.00. New York: Macmillan Company, 1911.

In this little volume will be found an interesting description of the work of the district nurse, evidently drawn from the writer's own experience. It contains a brief sketch of the history of the movement, and a discussion of the different problems which the district nurse is likely to encounter. It teems with practical and sensible suggestions and will be found of value by all who have to do with this important phase of the movement for public health.

Jenkins, Hester D. *Ibrahim Pasha.* Pp. 123. New York: Longmans, Green & Co., 1911.

Jessup, W. A. *The Social Factors Affecting Special Supervision in the Public Schools of the United States.* Pp. vii, 123. Price, \$1.00. New York: Teachers' College, Columbia University, 1911.

An investigation, historical and current, into the status of the special subjects of the course of study, based upon data from practically all the important school systems of the United States. It shows that the demand for the introduction of these subjects came from outside. Music came with a religious and social sanction; drawing, as a result of the need of trained artisans, with an additional and later industrial approval; domestic science, because of the necessity for teaching girls how to work; penmanship, with a commercial sanction; and physical training, as a part of a revival of interest in health and physique.

The order of popularity, judged numerically, is music 83, drawing 75, manual training 43, domestic science 30, penmanship 21, physical education 20, and domestic art 18. Based upon the compensation of superintendents and special teachers the order of importance is: Manual training, physical education, penmanship, drawing, domestic science, music and domestic art. The median salary is influenced by the proportion of men and women in each. The women teach most of the drawing—85 per cent, music, 63 per cent, and all of the domestic science and art, while the men are still favored for penmanship—61 per cent, and manual training 80 per cent.

Jones, Chester Lloyd. *Readings on Parties and Elections in the United States.* Pp. xv, 354. Price, \$1.60. New York: Macmillan Company, 1912.

Party control of the government, the development of party organization in the United States, the convention and the direct primary, the national convention and the election of the President, senatorial elections, elections to the House of Representatives and to the state legislature, party organization, the ballot, party problems and remedies, and direct legislation and the recall, are the main headings under which the author has classified his material. The nature of the sources of the material will be gleaned from the fact that, out of seventy-two readings, one is an excerpt from a judicial decision, two are excerpts from speeches, three from constitutions, five from state and federal statutes, seven from newspapers, nine from pamphlets, twenty-three from periodicals, and twenty-five from standard books. The work is, therefore, pre-eminently a collection of readings. It is not a source book. For instance, out of the eleven readings on party organization but one, the Rules of the Republican Party in Pennsylvania, may be called real source material. It would seem as though the party rules and regulations of at least a few other typical states might well have been given. The volume contains no comparative readings on party organizations and methods in other countries.

The book is admirably adapted for use in an introductory course in Party Organization and Methods. Each reading is prefaced by a clean, cogent paragraph succinctly stating the significance of the point at issue. The volume will be of inestimable value in all courses that deal with and for all readers who wish to become acquainted with actual party government.

Jordan, David S. *The Heredity of Richard Roe.* Pp. 165. Price, \$1.20. Boston: American Unitarian Society, 1911.

Probably no man in America is doing more to popularize and interpret modern biology than the writer, the president of Leland Stanford University. Using the hypothetical man, Richard Roe, the author tells of his inheritance from his ancestors, inheritances good or bad, and the varied problems thereby introduced. The little volume will be of great interest to the "gentle reader" who wants to know something of these vital questions. The story is well told and in non-technical language.

Keltie, J. Scott (Ed.). *The Statesman's Year Book, 1911.* Pp. lxxii, 1444. Price, \$3.00. New York: Macmillan Company, 1911.

Klein, Felix. *America of To-morrow.* Pp. xii, 359. Price \$1.75. Chicago: A. C. McClurg & Co., 1911.

The reader turns from this book with a feeling that it has been decidedly misnamed. Although it is called "America of To-morrow," it deals in a very decided sense with America of to-day as it was seen by a visiting Frenchman. The greater portion of the book is concerned with American manners and customs as they relate to educational institutions. Aside from a short discussion of the probable results upon American life of the present Japanese problem, the author fails entirely to reach "To-morrow."

Kurella, Hans. *Cesare Lombroso, A Modern Man of Science.* Pp. vii, 194. Price, \$1.50. New York: Rebus Company.

This little volume, written shortly after the death of the great criminologist, is an attempt to evaluate the work of Lombroso and to describe the position which he occupied in the field of positive social science. A concise biographical sketch is followed only by such discussion of his theories as is necessary to reveal his leadership in the revolutionizing of criminological science. The work is admirably done. No attempt is made to gloss over the errors or exaggerations. They are frankly acknowledged, but are regarded merely as incidental blemishes upon the otherwise great achievement of this man, of the true scientific spirit. In a very interesting appendix on Lombroso's spiritualistic researches, the author narrates the circumstances led him into this field of investigations and the methods by which he was deceived, and concludes: "To our enemies we freely give the Lombroso of senile decay, for the Lombroso of youth, forever young, is ours." In another appendix he gives a chronological list of Facts and Documents of Positivism, 1841-1865. The book is excellent reading for all students of Criminology, and especially for such as seek an unprejudiced estimate of the work of the founder of the Italian school.

Lawrence, W. W. *Medieval Story and the Beginnings of the Social Ideals of English-speaking People.* Pp. xiv, 236. Price, \$1.50. New York: Columbia University Press, 1911.

The English people are a composite of Germanic, Scandinavian, French and Celtic elements, fused in the melting-pot of the British Isles just as similar elements are now combining in the United States. Among the methods of approach to an examination of the social ideals of these early peoples, none is more suggestive than that of the great stories that grew into form during the medieval period. These narratives serve not only as faithful records of the vices, ambitions and social ideals of by-gone days, but picture as well the rise of class distinctions and the contrasting spirits of aristocracy and democracy. "Beowulf" brings out the honor, bravery and self-sacrifice of the Anglo-Saxon; the story of Roland reveals the patriotism, piety and prowess of the conquering Normans; the Arthurian romances picture the magic and mystery and soaring imagination of the Celt. The tone of the stories of Arthur is thoroughly aristocratic. The note of democracy is struck in the "History of Reynard the Fox" and in the story of Robin Hood; and finally, in the Canterbury Tales, all classes meet on common ground for the first time since the Norman conquest. This reflects a recognition of popular rights by the ruling aristocracy and the rise of a democratic spirit in English life.

These developments are traced by Professor Lawrence in facile popular vein, and the succession of lectures on the different stories makes ~~absolutely~~ interesting reading.

Levy, H. *Monopoly and Competition.* Pp. xviii, 333. Price, \$3.25. New York: Macmillan Company, 1911.

Lincoln, J. T. *The Factory*. Pp. xiv, 104. Price, \$1.00. Boston: Houghton, Mifflin Company, 1912.

A look backward for the sake of a look forward is the dominant quality of this essay. Five of its six chapters review in popular yet accurate fashion the main course of development of the factory system since the Industrial Revolution. The sixth appraises this development in social terms and lays down standards for future guidance. The factory, with all that it implies, has democratized the viewpoint and endeavor of the masses of men. Its splendid machinery must not be destroyed. Leaders must be developed "who see in wealth accumulated a treasure held in trust from which they are to feed and clothe the armies that they lead to peaceful conquests." In such leaders, "that conduct only is praiseworthy which advances the time when every man capable of industry shall be rewarded for his labor, not only with a loaf of bread, but with hours of fruitful leisure."

Meyer, Max. *The Fundamental Laws of Human Behavior*. Pp. xv, 241. Price, \$2.00. Boston: Richard G. Badger, 1911.

Montgomery, D. H. *The Leading Facts of English History* (Rev. Ed.) Pp. lxxxvii, 444. Price, \$1.00. Boston: Ginn & Co., 1912.

Morris, C. *The Progress and Achievement of One Hundred Years, 1812-1912*. Pp. 596. Price, \$2.25. Philadelphia: J. C. Winston Company, 1912.

Patterson, Isaac F. *The Constitution of Ohio, Amendments and Proposed Amendments*. Pp. 358. Price, \$3.00. Cleveland: Arthur H. Clark Company, 1912.

The first part of this volume is devoted to the original texts of the Ordinance of 1787 and the acts of Congress dividing the new territory and creating and recognizing the State of Ohio. The greater part of the volume is devoted to the documentary material relating to the constitutional conventions of 1802 and 1851. In each case the call for the convention, the list of its members, and the constitution adopted is incorporated. Seven pages are given over to the comparison of the provisions of these constitutions and the proposed constitution of 1874. The text, the total vote, and the vote for and against each of the twenty-five proposed and nine adopted amendments to the constitution of 1852 are also incorporated. A rather scanty allowance—twelve pages—is devoted to contemporary newspaper accounts of the convention of 1850 and the proposed constitution of 1874. The volume also contains the call for and the delegates elected to the constitutional convention now in session. The type is large and the typographical work is excellent. The volume will afford ready reference to the documents salient to the discussion of the constitution now being framed in Ohio.

Porter, R. P. *The Full Recognition of Japan*. Pp. x, 789. Price, \$4.00. New York: Oxford University Press, 1911.

Rembaugh, Bertha. *The Political Status of Women in the United States*. Pp. xiii, 164. Price, \$1.00. New York: G. P. Putnam's Sons, 1911.

The Political Status of Women in the United States is a digest of the laws

governing women in the different states and territories. It is headed by a note of explanation from the Women's Political Union of New York, under whose auspices the publication was made, stating the object and scope of the book. An introduction by Harriet Stanton Blitch follows, and then the main body of the book. The states are arranged in alphabetical order, the headings under each state are uniform, and the information well tabulated. It should form a valuable reference book on the political rights, privileges and immunities of the women of the United States.

Robinson, C. M. *The Width and Arrangement of Streets.* Pp. x, 169. Price, \$2.00. New York: Engineering News Publishing Company, 1911.

Scott, W. D. *Increasing Human Efficiency in Business.* Pp. v, 339. Price, \$1.25. New York: Macmillan Company, 1911.

This book clearly recognizes that human efficiency is based on definite psychological principles. The application of these principles is applied to the entire field of business activity—namely, the labor of production, the salesmen and the manager. The treatment is humanizing in that the ideals which should govern any normal working individual are shown to be directly related to the minutiae of everyday working experience. The mind qualities of imitation, competition, loyalty and concentration are discussed in their relation to specific business or labor problems. Physical health is analyzed in its relation to human progress. Pleasure and relaxation in connection with our daily efforts are shown to be necessary factors in bringing about a saner concept of human possibilities. An observation of these principles results in scientifically controlled experiences. When these experiences have become habits, the efficiency of men in fundamental occupations is shown to be greatly increased. The book leaves one with the impression that the sociological worker has here found a psychological basis for certain of his institutions, while an adjustment between human efficiency and wages tends to note a happy and sane commercial progress.

Squire, Belle. *The Woman Movement in America.* Pp. viii, 286. Price, \$1.00. Chicago: A. C. McClurg & Co., 1911.

The Woman Movement in America, by Belle Squire, of Chicago, is a short account of the struggle for equal suffrage and equal rights, beginning with Mary Wollstonecraft's "Vindication of the Rights of Woman," and tracing the movement down to the vigorous suffrage campaign of to-day.

The first few chapters of the book were written primarily for newspaper purposes. In welding them with other chapters into book form, the author has followed, throughout the whole, the method of the original chapters. The style, therefore, is rapid, graphic, pictorial and somewhat inclined to exaggeration. A criticism for lack of scientific method would hardly be just, since the author so frankly confesses her haste and her purpose. The book is calculated to appeal to the rapid casual reader rather than to the thinker.

Statistique des Grèves et Lock-Out en Belgique, 1906-1910. Pp. lxiii, 345. Price, 3 francs. Brussels: J. Lebléque & Co., 1911.

Steiner, B. C. *Maryland Under the Commonwealth.* Pp. xii, 178. Baltimore: Johns Hopkins Press, 1911.

This is a continuation of the well-known series of monographs by the same author on the early history of Maryland. *The Beginnings of Maryland* carried the subject to 1639, *Maryland During the English Civil Wars* (in two parts) continued it to 1649, while the present study covers the years 1649 to 1658. It is a concise presentation, mainly chronological, of the events of the period drawn from the official documents and other contemporary material contained in the publications of the Maryland Historical Society. The author has aimed to make the account as complete and authoritative as possible, that it may serve as "a compendious record of established testimony." The footnotes give precise references to the authorities for practically every statement of importance. The appendix, which forms a considerable part of the monograph, contains a conveniently arranged summary of the proceedings of the provincial courts during the period under consideration. This, like the rest of the work, is painstakingly done, with full citation of the sources, and will prove of value even to those who have the leisure to read the records themselves, which fill a part of the fourth and the whole of the tenth volume of the Maryland Archives.

Stephenson, H. H. (Ed.). *Who's Who in Science* (International), 1912. Pp. xvi, 334. Price, \$2.00. New York: Macmillan Company, 1912.

Stewart, W. R. *The Philanthropic Work of Josephine Shaw Lowell.* Pp. xv, 584. Price, \$2.00. New York: Macmillan Company, 1911.

To all who had the pleasure of knowing Mrs. Lowell, even in the slightest degree, this volume will be most welcome. All these will join in a vote of thanks to Mr. Stewart for putting so much of the writings of Mrs. Lowell in available form.

To others it need only be said that Mrs. Lowell was one of the finest of the many young women whom the Civil War left a widow. Born of a noted New England family, highly educated, married early during the war, she soon experienced its horrors in the deaths of her brother and her husband, both highly esteemed officers. The balance of her life she devoted to the care of her daughter and to social work.

In the effort to better social conditions, Mrs. Lowell soon became a leader. Her main interests were in charity organization, labor questions and civil service reform, but there were few social betterment movements in New York City between 1865 and 1905 in which she did not actively participate. Entirely aside from the personal interest in Mrs. Lowell, this account of the early stages of recent philanthropic activity will prove of great value.

The editor of the volume was for seven years Mrs. Lowell's associate on the State Board of Charities of New York and thus had close personal association with her.

Sumner, William G. *War and Other Essays.* Pp. xxvi, 381. Price, \$2.25. New Haven: Yale University Press, 1911.

One of the most versatile, independent and virile teachers of his time was

William Graham Sumner, who was professor of political and social science at Yale from 1872 till June, 1909, only a few months before his death. "An incessant worker," "fearless," "outspoken," "indomitable," "prince of teachers," are the descriptive terms used by his students.

In his earlier years, financial questions, currency, tariff, were his main interests, and his long service as protagonist of the free trade propaganda is well known. In later life he bore an active part in developing the newer science of sociology and the process of social evolution supplanted the older interests.

Though not a voluminous writer, preferring as he once said "to correct his own mistakes," Dr. Sumner wrote and wrote well. Aside from a few volumes of which "The Mores" is the most significant in view of his death before his projected magnum opus was far along, there are many essays worthy of preservation. As a memorial to Dr. Sumner his student and colleague, Albert G. Keller, has edited seventeen of these occasional writings, with one exception written after 1896.

Former students will welcome the collection. The keen, incisive thought makes the essays valuable as a basis of discussion. Those who do not know the other work of Professor Sumner have a treat ahead of them if they will dip into this volume.

Toynbee, Gertrude. *Reminiscences and Letters of Joseph and Arnold*

Toynbee. Pp. xi, 196. Price, 2s. 6d. London: Henry J. Glazier, 1911.

This little book reveals the characteristic mental attitudes of Joseph Toynbee and his son Arnold. The former was a gentle scientist of great personal dignity and sweetness, beloved by his family and friends. The same mental tone belonged also to his more famous son, who seemed to possess in addition a certain charming restlessness indicative of the beginning of the terrific spiritual upheaval characteristic of the last half century. Both father and son held a sympathetic attitude toward the changing religious and social-political point of view. They both had, at any rate, a strong inkling that from life alone can truth spring. Forerunners of pragmatism in this respect, they have added contemporaneous interest.

The letters are unduly devoted to the description of scenery from to-day's taste. The letters are indeed homely, domestic, commonplace. Yet shall one call "commonplace," letters whose implicit trust in life everywhere is indicated? "The Land Act is a great deal more intelligible to me after looking at peasants' holdings and talking to peasants themselves."

"The work (Henry George's book) is remarkable as the first—or almost the first—American treatise on an economical subject that reflects American experiences. It is the product of a study of Ricardo's Theory of Rent and observation of 'landgrabbing' in California." Arnold Toynbee's view of life as a whole is nowhere better expressed than in his letter to Maitland Hobday in 1875. "It seemed to me that the primary end of all religion is the faith that the end for which the whole universe of sense and thought, from the Milky Way to the lowest form of animal life—the end for which everything came into existence, is that the dim idea of perfect holiness which is found

in the mind of man might be realized; that this idea is God Eternal and the only reality; that the relation between this idea which is God and each individual man is Religion—the consciousness of the relation creating the duty of perfect purity of inner life or being, and the duty of living for others, that they too may be perfectly pure in thought and action; and, lastly, that the world is so ordered that the triumph of righteousness is not impossible through the efforts of the individual will, in relation to Eternal existence.”

This righteousness Toynbee saw could be realized only in fellowship. East London became, therefore, a spiritual necessity to him. Indeed the art of fellowship is still the central note of the social settlement.

White, Horace. *Money and Banking.* 4th Ed. Pp. xiv, 41. Boston: Ginn & Co., 1911.

Both publisher and author are to be commended for their enterprise in keeping this really valuable and useful work abreast of current problems of public moment. There is surely no volume of like scope and purpose so helpful as this in stimulating interest and affording information fundamental to the wise handling of our monetary and banking problems. The plan of the National Monetary (Aldrich) Commission is set forth concisely and clearly.

Wickware, F. G. (Ed.). *The American Year Book, 1911.* Pp. xx, 863. New York: D. Appleton & Co., 1912.

This very serviceable publication now enters its second year of usefulness. The new volume follows the main lines of organization of its predecessor. Such changes as have been made are those of detail; and these have been in the direction of improvement. The work fills a need not met by any other publication. No speaker, writer or investigator who wishes to keep pace with the main lines of accomplishment in America, year by year, can afford to be without this work.

Who's Who 1912 (England). Pp. xxvi, 2416. Price, \$2.50. New York: Macmillan Company, 1912.

Yoshimoto, Tadasu. *A Peasant Sage of Japan.* Pp. xvi, 254. Price, \$1.50. New York: Longmans, Green & Co., 1912.

Sontoku, as this delightful account tells us, was left a poor orphan boy dependent upon the kindness of relatives for his support. When he literally burned the midnight oil to advance himself in knowledge, his uncle chided him for thus causing him additional expense. In a spirit of perfect obedience the boy submitted, but managed by extra work to secure money to pay for the oil. Again his uncle remonstrated, saying that the money should be turned over to him to lessen the burden of his support. Sontoku dutifully acquiesced, but by laboring in the small hours of the night still secured enough to educate and fit himself for the great purpose of buying back his ancestral home and thus gratifying the spirits of his ancestors. When this pious task was complete a nobler work—to restore to prosperity certain poverty stricken villages—caused him to sell and forsake his ancestral home so as to follow the path the spirits of his ancestors would have desired. His

industry and his sagacity, his noble example and scrupulous conformity to the best ideals of the Japanese religion impressed all about him; and he was called from greater to ever greater tasks. He extended more and more the field of his usefulness. His deep religious feeling and strong personality gathered about him a band of disciples, one of whom wrote his life of which this little book is the English translation. The Japanese original has been circulated by the government. Although Sontoku died at the age of seventy, his work still lives and his example would seem to be in Japan what Tolstoi's is to the Russian peasant.

Besides the beautiful story of the sage's simple life the reader will learn much about the real heart and ideals of Japan and will feel his sympathy for the Japanese people quickened. Reverence for such a character as Sontoku would alone stamp the Japanese as a noble people.

REVIEWS

Ashley, W. J. *British Dominions*. Pp. xxviii, 276. Price, \$1.80. New York: Longmans, Green & Co., 1911.

Men of long experience in colonial affairs or in foreign trade contribute to this unusually satisfactory survey of the British possessions. No review of politics in the narrower sense nor of forms of government is attempted, the main object is to sketch the material development that has been achieved and to point out the extent of present commerce and the possibility of future progress. The "dominions" to which attention is drawn are, with the exception of the West Indies, the great non-tropical settlement colonies Australia, New Zealand, South Africa and Canada. The lectures, with one exception, were delivered during 1910-11 under the auspices of the University of Birmingham.

The opening discussion by the late Secretary for the Colonies, the Right Honorable Alfred Lyttleton, gives a general survey of English commercial policy toward the oversea possessions. The two lectures on Australia cover much the same ground—one from the point of view of the Colonial Administrator, the other from that of a man engaged extensively in Australian trade. Of the two on South Africa, one deals with the recent political difficulties, the agricultural development and possibilities, the labor problems, relations of the Dutch and English and immigration questions, the other with the ports, transportation facilities and organizations for promoting business.

The Honorable W. P. Reeves, late High Commissioner of New Zealand, gives a graphic account of the development and socio-economic experiments of that distant colony, which, though less an essay on commerce than the others, is perhaps the most interesting to the majority of readers. Of special interest to American students is the essay on the West Indies in which the late Commissioner of Agriculture traces the steps by which those picturesque colonies have been lifted from the condition of impending bankruptcy

which seemed to be their lot with the decline of the sugar industry. Though their prosperity is largely dependent on the market found in the United States, it speaks for a high class of colonial administration that no West Indian Colony is longer the recipient of grants in aid.

As is to be expected, the discussion of Canada's commercial outlook is grouped around her relations with the United States with especial emphasis on the reciprocity negotiations. The two points of view are strongly argued from a viewpoint unfamiliar to students in the United States. The essay by Sir Edmund Walker, President of the Canadian Bank of Commerce, gives a review of resources which enforces the reasons for our own large emigration across the border.

This book is heartily to be commended to those interested in American as well as English foreign commerce. It shows, through the eyes of those who have had long experience on the ground, an exceptional field for economic development and profitable foreign trade.

CHESTER LLOYD JONES.

University of Wisconsin.

Bingham, H. *Across South America*. Pp. xvi, 405. Price, \$3.50. Boston: Houghton, Mifflin Company, 1911.

This book deals largely with the experiences and impressions received on a journey over the old Spanish trade route from Buenos Aires via Potosi to Lima. Side lines are introduced in the form of brief discussions of the Brazilian ports touched before arriving at Buenos Aires and a trip along the west coast between Valparaiso and Mollendo. Happily for the reader there are no traces of the "daily journal" in the makeup of the book. The author has had the happy faculty of seeing much, getting the local coloring of the places visited, and then handing on the impressions to his readers in a manner which makes them seem almost like personal experiences. This quality of the book stands out especially in the description of Buenos Aires and Potosi; on the road to Challapata, and the trip to Choquequirau, the old Inca fortress in the valley of the Apurimac.

The reader finds much interesting information concerning Argentina and Bolivia especially, and less about Chile (northern) and Peru (southern). Bolivia perhaps occupies the center of the scene more than any other, and an interesting subject it proves to be whatever turn the discussion takes. The author deals not so much with facts and figures concerning these regions as with the impressions which they created. The book is therefore not a reference handbook, as so many others have been, but it is a highly interesting account, designed to give the average reader a better understanding of the life in these other parts of America.

A good many excellent illustrations and several maps enhance the value of a thoroughly good book.

WALTER S. TOWER.

University of Chicago.

Childs, Richard S. *Short Ballot Principles*. Pp. viii. 171. Price, \$1.00. Boston: Houghton, Mifflin Company, 1911.

Mr. Childs evidently approves Stevenson's paraphrase "man liveth not by bread alone but mostly by catch-phrases." Throughout this cleverly-written series of short essays there are scattered at least a score of expressions designed to make the ideas they stand for stick in the memory. Officers must be "visible," candidates must run in "wieldy" districts, the voters must be organized in "leadership parties," we must get rid of "ramshackle government" and "nomination by forfeit," "if it doesn't 'democ' it isn't democracy." These are examples of the original and in some cases strained effort to boil down ideas into epigrams. However far from the usual standard of academic books this may be in style and terms it has a virtue they often lack—it will be read. Few books have appeared in recent years on technical subjects which will hold the "average man" better than this.

The first five chapters are devoted to the short ballot idea proper which Mr. Childs has already done much to popularize. The discussion is laid upon a series of maxims. The more officers the people elect the less they have to say about elections. A democratic government is one which proves itself such by results. If the people are to control, the office must not be lost in a crowd, either of candidates or elections, therefore, the ballot must be short. Each theorem is proved in a similar way. The argument is forced home by considering the reader to be the average citizen and asking him to answer the questions the elector must face at each turn of the political wheel. In the same way the argument leads to the conclusion that the district must be neither so large that the candidate cannot reach his constituents, nor so small that the people lose interest in the election. Parties must be organized so that it will be easy for new leaders to come to the front by their own efforts. The old party machine must go—here the author wavers, he realizes that districts small in extent do not promise big men so he suggests proportional representation, apparently the Belgian system—but this would force dependence on parties which he wishes to avoid.

Next an analysis is made of the "fits and misfits" especially in city government. Naturally the commission form of government follows. One of the most convincing chapters is that which shows how even here popular control may be present only in form and that a system ideal on paper may be wrecked by oversight of small but important details. The short ballot idea is not necessarily present when a city is in form under a commission, and it may be present even in spite of a long ballot as Chicago's experience shows—thanks to the Municipal Voters' League.

The last chapters of the book are devoted to a criticism of our detailed constitutional limitations, our nomination methods and to a conclusion which is as unlike that ordinarily reached as is the book unlike its fellows. Politics for the average man is a bi-product or a diversion, if the people are to control it, it must be easy for them to manage. "A people who stick resolutely to their firesides and their work—yes, to money making—and stubbornly wait

for politics to come to them, are showing a sober, instinctive common sense that is sounder than the logic of those who scold them."

CHESTER LLOYD JONES,

University of Wisconsin.

Clemenceau, Georges. *South America of To-day.* Pp. xxij, 434. Price, \$2.00. New York: G. P. Putnam's Sons, 1911.

The former French premier has given us a volume that represents a study of conditions, social, political and commercial, in Argentine, Uruguay and Brazil, as seen during a three months' trip. It is the work of a statesman of wit and experience.

The title of the book may suggest to the reader something different from what it really is; it is not a traveler's description of the whole continent, but is confined to a general survey of Argentina, Uruguay and Brazil. Here, as in many other cases, there is a tendency to group, under the general denomination of "South America" and "Latin America," countries that politically, economically and in their respective degrees of civilization differ widely from one another. This failure to discriminate is unreasonable, since "South America" or "Latin America" never has existed and may never exist as a political entity.

Two-thirds of the book is dedicated to the Argentine Republic, a country that Clemenceau describes in a vivid way. The really wonderful progress of Argentina, the high level of European civilization which it has developed, the magnificence of Buenos Ayres, with its beautiful parks, monuments, public schools, theatres, hospitals, universities, etc., have found in Clemenceau a deep admirer and masterful portrayer. The reader will find in this volume a much needed revelation to American people of the position Argentina holds to-day among civilized nations.

Clemenceau, speaking of the Argentine family, says: "In their family relations, the differences between the social ideals of the North American and Argentinian are plainly visible. The family tie appears to be stronger in Argentine than, perhaps, any other land. The rich, unlike those of other countries, take pleasure in having large families."

In the remaining part of the volume he studies Uruguay and the Uruguayans; he describes the natural beauties of Rio de Janeiro, the advance of Brazilian society, finishing with a very interesting chapter on Brazilian coffee. These are his closing words: "And now, how can I resist the temptation to draw some sort of conclusion from these notes. . . In every calling there is but one road to success—work. When Candide returned from Buenos Ayres, he brought back from his travels the lesson that we must work in our gardens. Since his days our gardens have grown considerably, and since we are ourselves the first elemental instrument for all work, the first condition of improvement must be the improvement of the material. Therefore, let us work."

HENRY GIL

University of Pennsylvania.

Coulter, John Lee. *Co-operation Among Farmers*. Pp. vii, 281. Price, 75 cents. New York: Sturgis & Walton Company, 1911.

This book is one of the volumes in the Young Farmers' Practical Library series, under the general editorship of Ernest Ingersoll, and it is intended to interest the present generation of rural workers in the advantages of co-operation in the marketing of their products. The class of readers appealed to requires that the book should set forth the principles, methods and results of the co-operative movement among farmers in a simple and interesting manner in order to hold the attention of young people engaged in rural occupations. The author is professor of rural economics in the University of Minnesota, but has been for some time acting as expert in agriculture in the Bureau of the Census, Washington, D. C. Professor Coulter is not only educationally qualified to handle his theme successfully, but he approaches it from the standpoint of personal experience on a farm, an abiding interest in the solution of rural problems, and an extended study of the existing status of the co-operative movement among farmers in the United States. In all these features the author fulfils the requirements of his problem to the letter.

Co-operation among farmers, particularly in European countries, has ramified into numerous lines, such as marketing their products, buying supplies, live-stock and fire insurance, mutual credit, the purchase and use of machinery, and many other practical lines. But in all countries the fundamental problem has been the successful marketing of farm produce. This is the line of co-operation most carefully developed in the United States, and it is not surprising to find that this volume is, in fact, an account of co-operative marketing among farmers in this country. "Co-operative Marketing Among Farmers," therefore, would have been a more befitting title, for the author believes that co-operative marketing is "the keystone of rural prosperity." The methods of organization of co-operative societies and the results achieved by farmers engaged in these methods of marketing their produce, such as grain, meat animals, butter, cheese, poultry products, fruits, vegetables, and so on, are described in a very readable manner. The financial advantages which have come to farmers as a result of this movement are also pointed out. At the same time, the author is careful to warn his readers not to think that co-operation is a "cure-all" for all the ills afflicting farming and stock raising, and he explicitly points out the causes of failure which have come upon farmers' co-operative organizations in this country.

While improvement in the financial condition of farmers who have united into co-operative societies is regarded as a sufficient justification for the existence, continuance, and extension of this movement among farmers, its educational and social advantages are also emphasized. These relate chiefly to such features as removing the feeling of distrust and suspicion among farm neighbors, increasing the opportunities for social intercourse among members of societies, and the training of farmers in better business methods. It is pointed out that the greatest prosperity at the present time

is found among those farmers who have organized into co-operative societies, and the author is convinced that the time will soon come when each of the principal divisions of agriculture will have its own national organization to look after its special interests.

The table of contents calls for an index, but the latter is lacking. This is a defect which should be corrected in any future editions of this useful little volume which contains so much valuable information, not only for young farmers, but for intelligent readers in general who wish to keep in touch with the forces which are making for the uplift of agriculture and its dependent industries.

JAMES B. MORMAN.

Kensington, Md.

Dawbarn, C. *France and the French.* Pp. xi, 322. Price, \$2.50. New York: Macmillan Company, 1911.

Books about France are seldom unreadable whether they describe the *ancien régime* or the present-day life of the boulevards. This is no exception. The author has lived long enough in France to speak not as a Frenchman, but as a well-seasoned resident. What one sees and hears in contemporaneous French life is the burden of the book—it is not serious, at least it is not heavy; it aims to give the sort of picture of French life which is found for America in the articles of our better "staff correspondents." Each chapter is a photograph or a series of moving pictures, of the subject with which it deals. The chief object is to entertain rather than to instruct by tracing development.

The first third of the book sketches the new influences that have come into French life since the establishment of the Third Republic. Enthusiasm for democracy has made the French prosaic, the presidency though still surrounded with formality, has not the real glamour of the Empire and the same contrast follows through all phases of French life. Thrift makes the nation self contented, peace loving, and adjustment to his home surroundings keeps Jacques untouched by martial or political ambition and only mildly interested in colonial expansion.

Parties are atomic or personal, the groupings extend to the chambers and only in a very secondary manner to the electorate. Society is divided into the old families who look with suspicion on politics—unless it be diplomacy, the smug middle class, who control the government and the peasants who give it but small attention. Toward Paris the ambitions of every Frenchman lead. He does not, like the Englishman, live in the country to make an impress upon it, but to amass enough to enable him to retire to the capital. Two interesting chapters on French foreign relations and colonies close this division of the book.

The later chapters deal with the cultural interests of France, her architecture, her education, the stage, literature, the press and the problem of the

position of woman. As a picture of what is going on in France, this book will be welcome to a wide circle of readers.

CHESTER LLOYD JONES.

University of Wisconsin.

Dodd, Agnes F. *History of Money in the British Empire and the United States.* Pp. xiv, 356. Price, \$1.60. New York: Longmans, Green & Co., 1911.

The excuse for writing this book is to supply in compact and convenient form for students and general readers the essential facts and the more important lines of development that have been involved in the process of securing an adequate currency in English-speaking countries. There is no previous original treatment. Secondary sources are freely used. The manner of presentation is clear and interesting. One-half of the space is devoted to England, one-third to America, and the remainder to parts of the British Empire other than England.

Several early chapters deal with English coinage in law and in practice from the earliest times to the final and permanent adoption of the gold standard by the act of 1816. Bimetallism was introduced in the thirteenth century and experience through five centuries affords convincing proof that many ills relating to currency and industry were due to the impossibility of operating satisfactorily a bimetallic system. Incessant variation of the mint ratio between gold and silver and frequent debasement of coins by act of sovereign power were due either to ignorance of monetary principles or to a desire to improve the currency, and not, with few exceptions, to a scheme for increasing the revenues of the king. In this struggle to maintain a currency supply, the part played by the mercantile theory and by changes in price-levels are also given due prominence. The chapters on the development of banking in England deal largely with note issues. Such topics as the banking functions performed by goldsmiths, price-levels, crises, Peel's Act of 1844, the problem of an adequate bank reserve, are well handled.

The American account is executed in the same elementary, yet clear and pleasing manner which characterizes that of the British. The struggle of the colonists to secure an efficient medium and standard, the paper money experiments of the Revolutionary and the Civil War periods, wild-cat banking, the silver controversy, and note-issue under the National Banking System are passed in review. Since several brief histories of American experience are available, this part of the volume does not meet a real need.

The book is not free from errors. Among them are: The bold statement of Gresham's law (*e. g.* p. 23), which makes it untrue; the overworking of the principle of compensatory action in a bimetallic system whereby not only one but both of the precious metals are caused simultaneously, it is claimed, to flow into England (p. 52); the assertion (p. 260) that the decimal system was not in use in the American monetary system until after the Civil War; several minor errors, chiefly relating to dates, in the pages on the greenbacks. There are over one hundred direct quotations, but, in *unwisdom*

fashion, there is in every instance a failure to cite the exact reference. While it is interesting to have monetary changes brought into causal relationship with economic, industrial and political development, one gets the impression that our author gives, at times, undue weight to the influence of those changes.

DON C. BARRETT.

Haverford College.

Forman, S. E. *The American Republic.* Pp. xviii, 359. Price, \$1.10. New York: Century Company, 1911.

This is a textbook in civics, intended especially for use in high schools, academies and normal schools, and is an abridgment of the author's earlier "Advanced Civics." The plan of the larger book has been retained. Part I is a general treatment of the nature of the state and of government, of democracy, liberty, representation, federalism, political parties and the separation of powers. Part II deals with the organization of American government, considering the national, commonwealth, and local government in order. Part III considers the functions of government, international, commercial, financial, public welfare, etc.

The treatment is accurate, clear, and up-to-date; but the space allotted to municipal government and problems seems inadequate, the discussion of government activities will scarcely give immature students a clear conception of the division of function among federal, commonwealth, and local agents, and the two-page outline of party history (pp. 60-61) should either be expanded or omitted. A more fundamental objection may be urged against the general plan of the volume. For advanced students a preliminary survey of general political theory may properly precede the specific study of actual government, but beginners are likely to be confused by the eighty-four pages of "essential principles" with which the author introduces his subject. The experience of the reviewer leads him to believe that students should have some knowledge of the concrete facts of actual government before they are ready for broad generalizations. The book would be better adapted to the purpose intended if the author had narrowed the field rather than condensed the treatment of his earlier volume. As it is, too many topics are discussed too briefly.

RAYMOND GARFIELD GETTELL.

Trinity College.

Groat, George G. *Attitude of American Courts in Labor Cases.* Pp. ix, 400. Price, \$3.00. New York: Columbia University, 1911.

This volume is a contribution to the discussion of the labor question from the standpoint of a sociologist, the material used being the opinions of the courts in their consideration of questions of the organized activities of workmen and of legislative regulation of the conditions of employment. An avowed purpose of the author is to present contrasting opinions, which is effectively done; a

second purpose, that of "emphasizing by the larger number of selections the extent of the acceptance of particular views," is less successfully wrought out, and it is doubtful if this method of demonstration could be satisfactory. A polling of the courts is not without significance, but an adoption of the statistical method in such an undertaking would involve a thorough examination of the whole material, and probably a careful weighting of the factors, and it is not in evidence that either of these has been done.

The book is of difficult classification, since it is neither textbook, source book, nor book of cases. About one hundred and twenty-five cases are listed as of primary importance from the point of view of the discussion, and from these quotations are liberally made, several cases being quoted from repeatedly, so that by far the larger part of at least sixteen of the twenty-two chapters of the volume is quoted matter. The facts in the cases are generally not stated, though it is admitted that "the conditions in each particular case have had an important influence in shaping the decision;" and the omission of any index showing where the cases are cited leaves one at a loss in any effort to correlate the ideas presented in the various citations from the same case so as to get a view of them in their connections. This difficulty is increased by the rather prodigal and inapt use of aliases in entitling the cases as they are mentioned in the text; lengthy and important quotations are also sometimes made without in any way indicating the source. If it be added that the general index is inadequate, that the headings of the chapters are in some instances quite misleading and the subject matter not logically distributed, the fact nevertheless remains that Dr. Groat has given an interesting presentation of the views of the courts of last resort on some of the most important aspects of the labor question.

The subtitle of the volume is "A Study in Social Legislation," but after reading it one is inclined to offer in lieu thereof, "An indictment of our unsocialized judiciary," and the inadequate conception of economic facts by the courts in many cases, and their inability or unwillingness, in some instances, to profit by such knowledge as is possessed, seem clearly demonstrated. The underlying causes leading to the prevalent confused and unsatisfactory conditions are well stated, and the importance of the socialization of the courts is urged constructively and with fairly grounded hopefulness. The present writer is unable, however, to go as far as the author in some of his positions. Thus the belief is expressed that boycotts "may in time be regarded by the courts as legal." A tendency in this direction is indisputable, in so far as a few cases prevent the repetition of the statement made some twenty years ago to the effect that the courts had practically uniformly condemned them on a proper showing of facts; but to offset this we find not only the preponderance of current decisions, but also legislation in some states declaring boycotts unlawful. The elimination of the question of motive in the acts of combined workmen also seems to Dr. Groat both nearer at hand and more desirable than many will concede. Frequent and recent expressions of the highest courts declare that injurious or embarrassing acts affecting the peace of employment or business require justification in order to protect them from

being actionable, however legal they may be merely as acts, and the supreme court has recently held that the question of motive may be properly regarded as material.

LINDLEY D. CLARK.

United States Bureau of Labor.

Guenther, Louis. *Investments and Speculation*. Pp. 396. Chicago: La Salle Extension University.

When, in 1908, Frederick Lownhaupt published his book "Investment Bonds," he began his preface as follows:

"Some months past a prominent banker of this city delivered an address touching largely on investment bonds, in the course of which he was requested to mention a work devoted entirely to that subject. The reply was that he knew of no work of this nature and he believed that none existed, and a review of current financial literature confirmed this belief. That incident, together with numerous similar inquiries that have come to the attention of the author, is responsible for the present volume."

As a matter of fact, a year before the American Academy of Political and Social Science had issued a valuable contribution to the subject under the title, "Bonds as Investment Securities."

The only other book, devoted exclusively to bonds, to my knowledge, existing at the time, was written by William E. Davis, of Reynolds, Davis & Company. Mr. Davis' book has the captivating title, "I Have a Little Money; What Shall I Do With It?" The vein of the work corresponded with the title. It was a breezy commercial pamphlet, not intended as a serious contribution to financial literature.

During this past year the neglect that Mr. Lownhaupt mentions has been considerably repaired by the publication of three books that deal extensively or exclusively with bonds. "Investment and Speculation," by Mr. Albert S. Atwood, co-lecturer in finance with me at the New York University School of Commerce, Accounts and Finance, and financial editor of the *New York Press*; "Investments and Speculation," by Mr. Louis Guenther, editor of *The Financial World*, and "The Principles of Bond Investment," by myself. This rapid growth of bond literature is only one of many indications that the science of investment is coming into its own.

Each of these books has its own peculiar characteristics and sphere of usefulness. Mr. Guenther's excels the others in its direct, forcible appeal and its simple, clear expression. Regarding investments, at least, Mr. Guenther's book is sound. I am not qualified to pass on its treatment of speculation. Granting that a text-book is sound in its fundamentals, what better praise can you give it than to say it will reach, interest, and instruct the widest circle of readers? The vocation of journalism is an excellent preparation for the task assigned Mr. Guenther of preparing this work on "Investment and Speculation" for the series of Business Administration Text-books of La Salle Extension University.

Besides clarity, the book under review possesses brevity in a high degree. Nowhere is brevity more appropriate than in business literature. The chapter on Timber Bonds consists of a page and a half, but one will have to think hard to find an investment principle peculiar to these securities that has been omitted. The value of the raw product as a stable asset, proximity to transportation, or to markets, the fire hazard, insurance, the unreliability of cruisers' reports, automatic amortization as the property is depleted, the character of the obligors—all these essentials are condensed within five short paragraphs. By such brevity a great quantity of useful material is gathered together in a volume of moderate size.

If one must say something *per contra* in order to appear judicial—the individual chapters and the book as a whole lack order and logic in development. Moreover, one always feels a haste and failure to digest material, when, as in this case, a number of unrelated articles by different writers are added as a sort of afterthought.

However, a man who has no financial knowledge and training and wishes to learn about investment securities cannot do better than to read this book. It will be his own fault if he does not take away from it strong, clear, and correct impressions of the subject matter.

LAWRENCE CHAMBERLAIN.

New York City.

Henderson, C. H. *Pay Day*. Pp. vi, 339. Price, \$1.50. Boston: Houghton, Mifflin Company, 1911.

Mr. Henderson's strongly written book contains a discussion of industry for profit; its character, its causes and its resultant problems. Premising his study with a statement regarding the relation between industry and true education (preparation for a complete life), the author takes up the various phases of industry for profit as they effect the workers—women, children and men, the profit takers and the social structure generally. No recent statement of the relation between industry for profit and social maladjustment is clearer or more forceful than that which Mr. Henderson presents. His style is rugged and explicit. His language is impressive, and his conclusions, so far as they relate to modern social conditions, are driven home remorselessly by the logic of his arguments.

The latter part of the book deals with remedies. Perhaps, as the author suggests, pulling down is harder than building up, yet a reader of Mr. Henderson's work is impressed with the thought that his destructive work is much sounder than his constructive work. He proposes to educate the profit taker to the point where he will refuse to accept profit, and to educate the exploited workingman to the point where he will decline exploitation. Two sentences sum up the author's view of the problem. "It is then, evident that in the renovation of industry and the renovation of education we have the one possible, practical solution of the problem of making daily life for the whole people decent, rational, and progressive." "The way out is to make education industrial in being practical, vocational, and scientific."

all along the line, as well as thoroughly cultural, and to make industry educational in being helpful, developmental, and humanistic, as well as thoroughly efficient."

The author compels us to admit that industry for profit is at the basis of a large number of modern problems; he likewise carries us to the point where we must agree with him that education in some form is the only ultimate remedy for the situation. Whether the form of education which Mr. Henderson proposes is the right one, we are not prepared to say, but certainly the crux of his whole situation lies in the proper answer to this question.

SCOTT NEARING.

University of Pennsylvania.

Herter, C. A. *Biological Aspects of Human Problems.* Pp. xvi, 344. Price, \$1.50. New York: Macmillan Company, 1911.

This is a posthumous work of Dr. Herter who was Professor of Pharmacology and Therapeutics in Columbia University.

The volume is another indication of the growing recognition that many social phenomena have their causes in our physical organization. Quite in contrast to the book of M. Bergson, elsewhere reviewed in this issue, the problem of life is approached from the scientific side. With no attempt to decide which viewpoint the reader should hold, it must be recognized that Dr. Herter's own philosophy is materialistic. He believed that the idea of immortality was a logical outgrowth of the earlier attitude of man—an attempt as it were to escape death. Under present conditions, he holds such a conception unwarranted and unnecessary—as the same social results, as high ideals, could be gotten by a different method of teaching. Yet his materialism should not be confused with that type which is often condemned as self-seeking and in opposition to all the higher things. It is the belief of a man profoundly versed in chemistry and the nature of body changes. He visualizes thought as some chemical change not as supermaterial. It may well be that he has over-emphasized some of his observations. That he is correct in insisting that philosophy and social work must take into account these physical factors cannot be gainsaid.

In Book I—*The Animal Body as a Mechanism*—we are told in most instructive fashion how the body functions, how it starts and grows. As might be expected the author shows himself to have been a physician rather than a biologist for with brief mention of Mendel, Weissmann and the Hering-Semon hypothesis, there is little or no reference to recent studies of heredity. In Book II—*The Self-Preservation Instinct*, the chapter headings well indicate the contents: "The Instinct of Survival," "Defenses of the Body," "Self-Preservation and the Mental Life," "Death and Immortality." Book III—*The Sex Instinct*—treats of "Sex and the Individual," "Sex and Social Relations," "The Male and the Female Mind." The author believed that there are real differences in the minds of the two sexes. The *Fundamental Instincts in their Relation to Human Development* (Book IV) deals

with "The Arts and Religion," "Education and the Future of the Race," and "The Fruits of Education."

The latter part of the volume is not as systematic and complete, doubtless because the author did not finish his manuscript which here is rather fragmentary. As might be expected, too, his suggestions on social problems do not reveal the extensive knowledge characteristic of the earlier chapters. Many of his suggestions are most interesting. For instance, the suggestion that it would be worth while, for the sake of the race, for the government to make a long experiment to see what conditions favored longevity. He would like to see more attention paid to physical factors in marriage but fears that Anglo-Saxon notions will not permit the imposition of a physical certificate.

Recognizing frankly the shortcomings of the volume, it is one of tremendous interest and great value. It is simple, not technical, and will be of decided profit to all who are dealing with social subjects. It is to be hoped that other physicians will recognize as did Dr. Herter the necessity of educating the public at large as well as curing the sick.

CARL KELSEY.

University of Pennsylvania.

Hull, G. H. *Industrial Depressions*. Pp. xiv, 287. Price, \$2.95. New York: F. A. Stokes Company, 1911.

Numerous theories have from time to time been propounded to account for industrial depressions. Mr. Hull comes forward with a new one; that the "High Price of Construction is the real, original and underlying cause of the mysterious industrial depressions which have occurred in the industrial nations when these depressions have come in the absence of external and recognized causes."

In a sense there is some truth in this theory, but there are a few who would be willing to accord to this single factor the ultimate and controlling influence that is ascribed to it by Mr. Hull. It has long been recognized that the extraordinarily high prices paid for materials and labor during boom periods result almost inevitably in a reaction, but it is a mistake to assign the result to high prices of construction merely.

Mr. Hull has not been clear as to exactly what he means by the term "construction" throughout the book. Apparently, the term is intended usually to mean building construction, yet at other times, the context allows it to appear that other kinds of construction may also have been included.

Several of Mr. Hull's assertions are not borne out by the facts. The decline of 1900 which he has assigned to high prices of construction was influenced as well by the high prices in all quarters and by the more or less damaging effect exerted upon our export trade by the industrial and financial situation in Germany.

Another object lesson has been drawn from the decline of 1903 when, as Mr. Hull asserts, there was no financial panic or other external event of sufficient importance to bring any check to constructive industries, a state-

ment that is due largely to the author's failure to distinguish between a panic and a crisis or, apparently, to realize that there is a substantial difference between the two. The decline of 1903 was unquestionably influenced very strongly by the tremendous strain to which credit was subjected in the latter part of 1902 and early 1903, and which had been produced by the financial operations of the four years immediately preceding.

Instances of this sort could be multiplied if space permitted, for the writer has failed to familiarize himself with, what may be called "fundamental conditions." While the volume is interesting, it is unscientific in character, and as a solution of industrial depressions utterly fails of its purpose.

W. S. STEVENS.

University of Pennsylvania.

Jenks, J. W., and Lauck, W. Jett. *The Immigration Problem*. Pp. xvi, 496. Price, \$1.75. New York: Funk & Wagnalls Company, 1912.

For those who have need of a careful digest of the most important findings of the immigration commission, this book will serve excellently. Both authors had a personal part in the work of the commission, Professor Jenks as a member of the commission and Professor Lauck as the expert in charge of the industrial investigation. Consequently, they speak with authority. To criticise the content of the book is practically to criticise the work of the commission, for the findings of that body are accepted with an almost naive confidence, even in matters about which there is serious difference of opinion, and phases of the subject not covered in the report are virtually untouched in this volume. Unfortunately, however, the authors have allowed themselves to be led into making a number of sweeping generalizations, which, while perhaps true, are not supported by any evidence given in the book, and are not justified in a work which professedly relies almost solely on the report of a government commission, and in which practically no critical references to other authorities or sources of information appear. The casual reader is in danger of accepting these too unhesitatingly, because of the authority which the book naturally carries with it. Many of these have to do with the ease of assimilation, such as the statements on pages 198, 209, and particularly on page 267, where the results of Professor Boas' studies are accepted unquestioningly, and a far-reaching deduction based thereupon. Only two other instances may be mentioned here; the conclusion as to the total effect of the transient character of modern immigration, on page 185, and the counsel given on page 197 to pay little attention to the social and political aspects of immigration.

As a literary production, the book leaves much to be desired. The English is rough and in many cases so bad as to suggest undue haste in either composition or proofreading. Occasionally there are ambiguities or omissions which confuse or distort the meaning. Thus the term "native white Americans" is used loosely; on page 154 "adult wage-earners" should be

"adult male wage-earners"; on page 178 nothing is told us of the rank which Italians hold in the preference of the southern contractor, although the Italians are said to be the most numerous workers; and on page 216 the "total of 6,800" might refer either to domestic servants or the Chinese race.

This enumeration of faults, however, must not be allowed to obscure the merits of the book, which are many. It contains a large amount of data, for the most part conveniently arranged and reliable, and if used with discretion should be of great value to all students of social subjects.

HENRY PAUL FAIRCHILD.

Yale University.

Lowell, Percival. *The Soul of the Far East.* Pp. x, 266. Price, \$1.60. New York: Macmillan Company, 1911.

Hart, Albert Bushnell. *The Obvious Orient.* Pp. x, 369. Price, \$1.95. New York: D. Appleton & Co., 1911.

The unlikeness between the Far-Oriental and the Western mind can hardly seem greater than that another dissimilarity, also exhibited by Mr. Lowell—the mental unlikeness of the physical scientist to the specialist of economic or political science in his method of dealing with social questions. The man of mathematical habit tends to regard social concepts as being more precise than they really are, and to reason from them with a confidence in his abstractions better suited to the simplicity of astronomical investigation. This habit of simplifying what is really complex is frequently noticeable in the discussion of current political questions, by mathematicians and physicists.

The "Soul of the Far East" is said to be characterized by "impersonality." "Individuality, personality, the sense of self are only three different aspects of the same thing." This characteristic is indicated by an extreme of filial piety—the subordination of the individual to his parent—a neglect to observe the individual's birthday (New Year's Day serving as a general birthday), and courtesy, which is a sort of belittling of oneself. In language, impersonality is shown by the lack of gender ("indifference to woman is but included in a much more general indifference to mankind") by the placing of nouns before verbs, as nouns denote facts, while verbs express action, and action as considered in human speech is mostly of human origin. This constitutes "a precedence accorded the impersonal element in the language over the personal." In religion, Buddhism is the *cri du cœur* of impersonality. This personality, this sense of self is a cruel description and a snare. "The mythological creations of the Oriental are feared, not loved. His ideal world remains as utterly impersonal as if it had never been born." The lack, among Oriental peoples, of individuality and imagination, which is to mental life "what variation is to material organization," has arrested these developments. Like the moon, "their vital fire had spent itself more than a millenium ago." The Japanese only copy; the Chinese will not even do that.

This characterization is not without elements of interest, but its main thesis fails to convince. "Impersonality" has not the definite significance, for

example, of "rectangle" or "gravitation." We wonder in fact what it does mean when we are told that the Japanese, most aggressive of peoples, nationally and individually are "lacking in the sense of self." The practices or race qualities which the astronomer, in his habit of sweeping generalization, attempts to submit to this one explanation, spring doubtless from many causes, mostly unexplored by our present knowledge.

If there is, indeed, a law of senile decay for nations, it is scarcely exemplified in China; the oldest of nations is in these weeks the most youthful. If the mythological creations of the Orientals are "feared, not loved," so were those of our own ancestors. Did not even Martin Luther, for instance, fill the very air with malicious devils, which buffeted him in a storm, or disturbed him in his work by malicious noises? The best peoples have copied much. It is too soon, perhaps in some fields too late, to decide that the Japanese will do no more. As to this whole question of a special creation of different races, a somewhat intimate acquaintance with the Soul of the Far East as represented by a large number of Chinese young men, has impressed me, as it has other teachers, with the essential similarity of their minds, under similar training, to our own. Men of Chinese families, born and reared in America, are young Americans in their tastes and manners.

"The Obvious Orient" is an account, well worth reading, of things seen by a traveler, moving rapidly but well qualified to observe. He commends, for the most part, our rule of the Philippines, defends the Japanese against the charge of commercial dishonesty, describes with admiration the "Japanese system" of education and government, makes some guesses at the future of the various Oriental nations described, and denies that the Japanese military power is a menace to the United States. The book is much superior to most of the recent somewhat abundant writing on that quarter of the globe.

A. P. WINSTON,

College of Finance, Peking, China.

Reed, A. Z. *The Territorial Basis of Government under the State Constitutions.* Pp. 250. New York: Longmans, Green & Co., 1911.

At a time when public attention seems focused, perhaps to an excessive degree, upon the machinery and functions of national governments and upon general issues, national or international in scope, it is particularly valuable to read such a treatise as this excellent volume of the Columbia University Studies in Political Science, and to remember that our political system, with its rules of suffrage and representation, rests essentially on the basis of local government, and that the laws that chiefly affect the great majority of citizens are created by commonwealth legislatures, chosen from local districts.

After a brief historical chapter on political subdivisions during the colonial period, the author treats at length the constitutional provisions in American commonwealths determining the makeup of the county, of urban districts, and of districts for special administrative purposes. On this basis the systems of representation in the upper and lower houses of the common-

wealth legislatures, and the methods of reapportioning the districts of representation are worked out.

While, in the main, the author limits himself to an impartial statement of facts, the treatment of the mass of material being necessarily technical, in a brief concluding chapter he permits himself to make several broad generalizations and statements of opinion. He considers the chief weaknesses in our system of political subdivisions to be their complexity, the manner in which they discriminate against urban centers, and the political impotency of the county, and he suggests as one remedy the change from a centralized commonwealth government to a system of broad local charters for rural and urban territory alike.

RAYMOND GARFIELD GETTELL.

Trinity College,

Saleeby, C. W. *Woman and Womanhood*. Pp. 398. Price, \$2.50. New York: Mitchell Kennerley, 1911.

Woman is the storm center of a great mass of modern discussion to which the author of the present volume has contributed not a little. The book contains a series of interesting chapters which deal with such topics as Determination of Sex, Mendelism and Womanhood, The Higher Education of Woman, Education for Motherhood, On Choosing a Husband, and the like. The viewpoint held consistently throughout places woman at the center of the biologic and social world.

Mr. Saleeby always writes as a biologist, and unfortunately he frequently applies biologic analogies which are scarcely sound from a social standpoint. For example, his attempt to establish a definite relation between the cells of a biologic organism and members of a human society, is neither original nor successful. In discussing the higher education of woman, the author shows a much less fundamental grasp of the problem than is possessed by men like G. Stanley Hall. Apparently he has never passed the stage of believing that the higher education of women should consist in advanced domestic science courses.

On the whole, however, the theories advanced in the book are biologically and socially sound. The chief criticism which must be launched against it is a criticism of unscholarliness in statement and presentation. For example, on page 179, the author writes, "We know by observation amongst ourselves that hardness and tenderness are to be found running through families—are things which are transmissible." This is cited as an illustration of a parental instinct which is inherited. That Mr. Saleeby understands the modern doctrine of heredity is amply proved by his discussion of it in a previous work (*Parenthood and Race Culture*). Understanding it, he is absolutely unjustified in any such loose statement. Similarly in his discussion of alcohol, as "the chief enemy of women," the author cites "the conclusions published in several papers," regarding the injurious effects of alcohol. This conclusion covers two and a half pages. Later in the chapter, he discusses, with but scant comment, the scholarly bulletins which Professor Karl Pearson has

issued from the Eugenics Laboratory, and which contradict in every particular the author's statements.

Similarly in citing his authorities, the author, in this and in his former works is notoriously careless. Important and even questionable theories are propounded without any attempt to give the readers an accurate knowledge of their source. When citing one of Lester F. Ward's most significant contributions, Saleeby writes in a note "See his 'Pure Sociology.'" Scholars agree generally on certain methods of presenting data. Those men who expect a hearing among scholars must adhere to scholarly methods in exactly the same way as a man who is writing English must use dictionary terms.

I have devoted so much of this review to, what may appear to be, a narrow criticism, because of the flood of books which are continually written enthusiastically by able men, but written in such a manner that their statements cannot be accepted at their face value. We cannot question Saleeby's knowledge of his material, but we may justly protest, and protest vigorously, against ragged and unscholarly presentation.

SCOTT NEARING.

University of Pennsylvania.

Semple, E. C. *Influences of Geographic Environment on the Basis of Ratzel's System of Anthro-Geography.* Pp. xvi, 683. Price, \$4.00. New York: Henry Holt & Co., 1911.

This book must be regarded as the most valuable contribution to the subject of anthro-geography that has yet been published. Based upon Ratzel's "Anthro-Geography" it does very much more than make available in English many of the facts and conclusions of that great and pioneer work. Miss Semple has written a new book. She has arranged and classified, tested and verified, the facts of Ratzel, altered and revised many of his conclusions, and at the same time added much original material gathered from a very wide range of reading and observation, put together according to her own plan and making out her own ideas. The book is at once a survey of the great field of environmental influence upon human activities and a mine of information of great value, especially to the geographer and the student of the social and political sciences, and of absorbing interest to the intelligent general reader. This book is a good illustration of the meaning and the value of scientific geography.

To give in a few words an adequate idea of its subject matter is impossible. The scope and range of the discussion is indicated by the chapter headings, some of which are: The Operation of Geographic Factors in History; Classes of Geographic Environment; Society and State in Relation to the Land; Movements of Peoples in their Geographic Significance; Coast Peoples; Island Peoples; Influences of Mountain Environment; The Influences of Climate, etc. It is perhaps inevitable that in a work of such scope and character as this occasional over-emphasis may be laid upon the influence

of environment. Miss Semple's illustrations are so well chosen, however, that such criticism is reduced to a minimum.

The following quotation from the opening chapter may well serve to give an idea of the author's style and the general thesis treated in the entire book: "Man is a product of the earth's surface. . . . She has entered into his bone and tissue, into his mind and soul. On the mountains she has given him leg muscles of iron to climb the slope, In the river valley she attaches him to the fertile soil, circumscribes his ideas and ambitions by a dull round of calm, exacting duties, narrows his outlook to the cramped horizon of his farm. Upon the wind-swept plateaus, in the boundless stretch of the grasslands and the waterless tracts of the desert, where he roams with his flocks from pasture to pasture, where life knows much hardship but escapes the grind of drudgery, where the watching of grazing herd gives him leisure for contemplation, and the wide-ranging life a big horizon, his ideas take on a certain gigantic simplicity; religion becomes monotheism. God becomes one, unrivalled like the sand of the desert and the grass of the steppe, stretching on and on without break or change."

A most commendable feature of a book of this size is its devices for making it readily accessible as a reference. Not only does it contain a full table of contents and complete index, but marginal paragraph headings are found on each page, and at the end of each chapter is a full list of references to authorities quoted or referred to in the text.

G. B. ROOBACH.

University of Pennsylvania.

Vrooman, F. B. *The New Politics*. Pp. 300. Price, \$1.50. New York: Oxford University Press, 1911.

Those who are interested in the recent efforts in the direction of a reorganization of political parties will no doubt welcome this volume of stimulating suggestions on "The New Politics." The writer disavows any intention of presenting to the public either a treatise or a collection of essays. He offers rather a series of comments, quotations and criticisms bearing on the politics of the United States past and present.

Eighteenth century individualism which favored the restriction of government functions within the narrowest possible limits is held responsible for most of the ills of our political and social life. It is maintained that it was to the interest of the exploiter, the financier, and the politician to have no state control which would protect the weak from the onslaughts of the strong; and that freedom of contract, free competition and a free reign to individual initiative under a *laissez faire* philosophy resulted in a theory of the state which supported private interests at the expense of public rights. The doctrine attributed to Machiavelli, that politics and economics are to be separated from ethics, is condemned because it is regarded as furnishing a basis in morals and philosophy for the man who wishes to place self-interest and personal greed above all else in business and social life. Adam Smith and the classical economists, Rousseau, Jefferson, and Bentham, are held

responsible with Machiavelli for the establishment among men of a political theory which aimed to justify "a man's selfishness to himself."

The author insists that politics and ethics must again be united in a theory of government which sets the common good above liberty and her handmaid, license. In his judgment the "riot and anarchy prevailing over those areas where there is neither state nor national control" must be subjected to government regulation through the progressive development of nationalism in accord with the principles enunciated by Washington, Hamilton, and Marshall.

"The New Politics" is characterized as a plea for a democracy of nationalism to replace a democracy based on individualism; for a reconsecration of government to the cause of the people; for the conservation of natural resources; for the application of scientific principles rather than selfishness and prejudice in the operation of the affairs of government. The new political faith is held to be opposed to Socialism, which too frequently is inspired by personal motives, and is defined as a compound of Greek principles of government and the Christian virtues as exemplified in the life of Christ. The writer calls to account those who still cling to the doctrines of individualism as formulated in the writings of eighteenth century French philosophers, in the Declaration of Independence and in the Declaration of Rights.

The limitations and faults of the work are very marked. Without any serious loss to the views presented the volume might have been greatly condensed. The writer frequently shows a lack of knowledge of the ordinary facts of history. A careful reading of the records of the past scarcely substantiates the harsh criticisms of Rousseau, Jefferson, and some of their contemporaries, or the extraordinarily high opinions of Hamilton and Marshall. One may well wonder whether the principles of good government and politics were summed up once for all in the works of Aristotle or whether there has not been a vision of the common good in some respects at least higher than that of the German philosophers Kant and Hegel. It is apparent that the writer is furnishing a polemic rather than a thorough and systematic treatment of his subject. The volume must be judged, however, rather as a popular presentation of personal views and observations on politics. From this standpoint it contains much suggestive material stigmatizing some of the most deplorable phases of a passing social order and offers a rather definite program for progressive political reform.

CHARLES G. HAINES.

Whitman College.

Weill, G. *Histoire du Mouvement Social en France*. Second Edition. Pp. ii, 563. Price, 10 francs. Paris: Felix Alcan, 1911.

By "Mouvement Social" Professor Weill understands the sum of all the efforts made to ameliorate the economic condition of the working classes. These efforts may take on the form of patronage by the rich, association among the working men, or legislation by the state. The book before us

concerns itself almost exclusively with the last, though, however, the author finds the development of socialist groups and factions at times so absorbing, that the story of how the somewhat bewildering factions ultimately bring sufficient pressure to bear upon the government to secure remedial legislation is sometimes pushed into the background. The labor legislation and its causes in France during the last sixty years is the story of the articulation of the needs of the working classes on the one hand and the laws on the other. Under the system of manhood suffrage, the working man possessed the legal weapon to enforce his demands, and in no country has he used it so successfully as under the Third Republic in France.

The work begins with the coup d'état of 1851 and carries the study down to the elections in 1910. The new edition, therefore, gives us the continuation of the story from 1902 to 1910, in addition to a complete re-working of the last seven chapters in the light of the more thorough study of the subject in recent years.

Of the Second Empire the author is very critical and sarcastic. It posed as the adversary of socialism while it at the same time laid claim to being the benefactor and friend of the working man because of its comprehensive public works. "Gagner la sympathie des ouvriers par de grands travaux publics était dans la tradition impériale." "The working man lacks work," said Napoleon, "he easily yields to intrigue and may be readily aroused. I fear insurrections growing out of a lack of bread more than a battle against 200,000." Hence the great activity in public works, the building of railroads, canals, telegraphs, and the renovation and rebuilding of cities under the Empire. All this gave work, prosperity and contentment; so at least the emperor hoped. But he calculated badly. With the increase of workers, the advent of machinery and the growth of the large financial fortunes, the cost of living rapidly rose. In spite of the miserable conditions of the laborers, a class consciousness was developing among them and after 1860 it manifested itself in many ways, winning for the workmen the right to form associations in 1863, and five years later, other extensive concessions.

But the revolutionary socialist movement of the late sixties was thoroughly discredited by the Commune and in its stead, or rather in place of revolution and strikes, syndicalism and co-operation appear. About the same time the ideas of Karl Marx began to exercise a strong influence on socialistic thought in France. Collectivism in its various forms comes to the front till it is completely triumphant at the Congress of Marseilles in 1879. An alliance with the republicans, seeking support among the masses and promising extensive reforms was effected, the radicals making common cause with them in the election of 1893.

But for a decade or more before this the government had been forced to deal with some of the more urgent of the social and economic problems. The group in control of the government to 1879 was indifferent and hostile to the demands of labor. It considered that it had done quite enough by establishing free and compulsory education. But with 1879 power passed entirely into the hands of the Republicans. In 1881 came the law for the freedom of the press,

in 1882 the extension of elementary instruction to all. After a prolonged and bitter fight the famous law of 1884 was passed which granted to the working man not only the right of association, but also of coalition. "Qui autorisait les syndicats et les unions de syndicats." During the long controversy over this measure the senate chosen by the municipal councils repeatedly revealed its greater conservatism by strenuous opposition. The next important "legislation ouvrière" came with the abolition of the *livret* in 1890; then followed measures for the protection of mine workers, for the reduction of the hours of labor for women and children, for the proper inspection of factories, for the arbitration of disputes before justices of the peace, and for the regulation of the safety and sanitation of mines and factories.

The work is clear and direct, showing an excellent grasp of the historic forces at work in forcing the labor legislation on a reluctant bourgeoisie which is still opposed to the Gambetta's idea "l'alliance du le prolétariat et de la bourgeoisie." There is a poor index, an excellent table of contents and an up-to-date bibliography.

WILLIAM E. LINGELBACH.

University of Pennsylvania.

Wyman, Bruce. *Control of the Market.* Pp. vii, 282. Price, \$1.50. New York. Moffat, Yard & Co., 1911.

The limits of a brief review are entirely inadequate for more than an appreciation of the excellent work done by Professor Wyman in his "Control of the Market." This little book admirably summarizes the recent extensions of the police power into the various fields of business regulation. The various conditions which call for public regulation of private business, so far as concerns the right of private enterprises to fix charges and determine supply and service, are carefully set forth, and the views of the various courts are fully illustrated by a large number of quotations from leading cases.

Starting with a discussion of the tendency toward state control, the author, in Chapter II, explains the principle on which the form of public regulation with which his book deals is based. This is the desire on the part of the public, which has not been the least modified by the tendency toward regulation in various lines, that competition, which in another place is defined as "that condition of business which puts the distributors at the mercy of their public," should be continued.

Next in order Professor Wyman explains the different methods by which competition has been controlled by the establishment of various forms of monopoly, including contracts between manufacturers and distributors by which they are given unfair advantages, coercion by labor unions, and pressure by various forms of trade combination. In connection with this summary of successful attempts at monopolization is given an outline of what the courts have regarded as unfair methods of competition employed by these various combinations.

The author next approaches the solution of the problem presented by

the necessity for public regulation. He finds that the power of the state should be extended over all forms of business which are affected with a public interest, and that when monopoly is established in any industry, the public interest immediately emerges, since the public is forced to deal with the monopoly which, in the absence of public regulation, can charge such prices and impose such conditions as it pleases, restrained only by the fear of unprofitably reducing the demand for its product or services. This restraint, as Professor Wyman clearly shows, is entirely inadequate to protect the public against the use of monopolistic power.

The solution of the problem the author finds in the extension over every form of monopolistic enterprise of the power of regulation, either by some form of public commission, a device whose general application he seems to approve, or by general statutes to be interpreted by the courts. Such an extension of public regulation he finds to be entirely consistent with the principle of fair competition and indeed essential to the preservation of that principle, since in the absence of the present regulation of monopoly he finds that the imminent alternative will be state ownership of monopolistic industries.

Aside from the important contribution which it makes to the solution of the so-called trust problem, the Control of the Market will be found helpful by every attorney in contact with large business operations, and especially valuable in connection with university courses in public regulation.

EDWARD S. MEADE

University of Pennsylvania,

REPORT OF THE BOARD OF DIRECTORS OF THE AMERICAN
ACADEMY OF POLITICAL AND SOCIAL SCIENCE FOR
THE FISCAL YEAR ENDED DECEMBER 31, 1911.

I. REVIEW OF THE ACADEMY'S ACTIVITIES

It is a source of great satisfaction to your Board to be able to place before you at the close of each fiscal year a record of the expanding influence of the Academy. With ever-increasing faith in the mission which the Academy has to perform, your Board has spared no effort to make the Academy one of the important factors in the formation and guidance of the public opinion of the country. The year 1911 has witnessed an important step forward in this respect. The publications of the Academy as well as its sessions have been arranged with a view to making a definite contribution to the solution of the important political, social and industrial problems confronting the country. The success of these efforts is attested by the widespread discussion to which both our publications and meetings have given rise.

Your Board desires again to emphasize a fact, to which attention has been repeatedly called in successive annual reports. The Academy's activities are considerably hampered by the absence of an endowment fund, and it is the hope of your Board that at some time in the near future our members will co-operate in supplying this fundamental need for the further development of the Academy's activities. A separate building for the conduct of our publication work and the holding of our sessions should be provided, with sufficient additional endowment to enable the Academy, through a series of fellowships, to conduct independent investigations. It is the hope of your Board that when the Academy celebrates the twenty-fifth anniversary of its founding, in 1914, we will be able to accomplish this important purpose.

II. PUBLICATIONS

We have been particularly fortunate in the selection of the subjects for the special volumes issued by the Academy. It must be borne in mind that in most cases these subjects are selected a year in advance. The Academy is under obligations to the Chairman of the Publication Board, Prof. Emory R. Johnson, the Associate Editors, Prof. E. C. Stowell, Dr. Clyde L. King, Prof. Thos. Conway, Jr., Prof. S. S. Huebner and Prof. J. P. Lichtenberger, as well as the other members of the Publication Board for the foresight which they have shown in selecting the subjects of these special volumes. In most cases these volumes

have appeared when the attention of the country was concentrated on the questions to which they relate, and have exerted no small influence in the formation of a sane and healthy public opinion.

During the year 1911, the following special volumes appeared:

| | |
|----------------|---|
| January..... | "Electric Railway Transportation." |
| March..... | "Public Health Movement." |
| May..... | "Political and Social Progress in Latin-America." |
| July..... | "Risks in Modern Industry." |
| September..... | "American Produce Exchange Markets." |
| November..... | "Commission Government in American Cities." |

In addition, there were issued during 1911 the following supplements:

| | |
|----------------|---|
| January..... | "Need for Currency Reform." |
| May..... | "Living Wage of Women Workers." |
| July..... | "Uniform Child Labor Laws." |
| September..... | "Work of the National Consumers' League." |

III. MEETINGS

During the year 1911 the Academy has held the following meetings:

| | |
|------------------|--|
| January 19.... | "The Conservation of Natural Resources." |
| February 28.... | "The Menace of War as Europe Sees It." |
| April 7 and 8... | "Risks in Modern Industry" (5 sessions). |
| October 27.... | "Program of Modern Social Reform" (3 sessions). |
| November 23.... | "The Pure Food and Drugs Act, Its Cause, Purpose and Effect." |
| December 13.... | "Shall the United States Ratify the Pending Arbitration Treaties with Great Britain and France?" |

IV. MEMBERSHIP

The membership of the Academy on the 31st of December, 1911, was 5,143, with a subscription list of 563, making a total of 5,706. Of the 5,143 members, 1,157 are residents of Philadelphia, 3,784 are residents of the United States outside of Philadelphia, and 202 are foreign members. Of the 563 subscriptions, 2 are Philadelphia, 503 United States outside of Philadelphia, and 58 foreign. Compared with the membership on the 31st of December, 1910, we find that in the Philadelphia membership there is a gain of 123, in the membership of the United States outside of Philadelphia 508, and in the foreign membership a loss of 3, or a gain of 631 in the membership list. In the subscription list there is a gain of 49 in the United States outside of Philadelphia and a loss of 5 in the foreign subscriptions, making a total gain in membership and subscriptions for the year of 680.

Nine members have been transferred to the life membership roll:

Richard B. Bennett.
William S. Myers.
Charles N. Dietz.
Baron Y. Hayashi.
Mrs. Alfred Hodder.
Miss Mary A. Burnham.
Henry L. Shattuck.
James McC. Mitchell.
Dr. Ruy Barbosa.

During the year the Academy has lost through death 63 of its members, 2 of whom were life members. The death of these members has deprived the Academy of some very warm friends and enthusiastic workers.

V. FINANCIAL CONDITION

The receipts and expenditures of the Academy for the fiscal year just ended are clearly set forth in the Treasurer's report. The accounts were submitted to Messrs. E. P. Moxey and Company for audit and a copy of their statement is herewith appended.

In order to lighten the burden of expense incident to the Annual Meeting a special fund amounting to \$1,485 was raised. The Board takes this opportunity to express its gratitude to the contributors to this fund.

VI. CONCLUSION

Your Board desires to take this opportunity to thank the ever-increasing circle of Academy members who are showing interest in the work of the Academy, not only through advice and suggestion, but also in stirring up interest in the work of the Academy in the sections of the country in which they live. Work of this character strengthens the hold of the Academy on the opinion of the country, and enables us more fully to perform the national service for which the Academy was founded.

The auditor's report is appended.

PHILADELPHIA, PA., January 13, 1912.

MR. STUART WOOD,

*Treasurer, American Academy of Political and Social Science,
Philadelphia.*

DEAR SIR: We herewith report that we have audited the books and accounts of the American Academy of Political and Social Science for its fiscal year ended December 30, 1911.

We hereby certify that the Statement of Assets and Liabilities and the Statement of Receipts and Disbursements submitted herewith are correct.

Yours respectfully,

EDWARD P. MOXEY & Co.

SCHEDULE "A"

Statement of Receipts and Disbursements.

Balance Cash on Hand, December 31, 1910..... \$4,231.50

RECEIPTS.

| | | |
|------------------------------------|-------------|------------------|
| Annual Subscriptions..... | \$20,223.52 | |
| Life Memberships..... | 886.38 | |
| Special Contributions..... | 1,893.08 | |
| Subscriptions to Publications..... | 2,609.64 | |
| Sales of Publications..... | 5,791.66 | |
| Income from Investments..... | 2,675.83 | |
| Investments paid off..... | 3,000.00 | |
| Interest on Deposits..... | 38.24 | |
| | | <u>37,118.55</u> |
| | | \$41,350.05 |

DISBURSEMENTS.

Office Expense:

| | | |
|---------------------------------------|------------|-------------------|
| Office Salaries (9 clerks)..... | \$6,364.25 | |
| Special Clerical Service..... | 124.25 | |
| Telephone and Telegraph..... | 196.99 | |
| Postage..... | 1,416.83 | |
| Stationery and Supplies..... | 494.88 | |
| Freight, Express, Car Fares, etc..... | 251.19 | |
| | | <u>\$8,848.39</u> |

Philadelphia Meetings:

| | | |
|---|----------|-----------------|
| Hall Rentals..... | \$478.38 | |
| Stationery, Engraving and Printing..... | 1,399.22 | |
| Clerical Services..... | 44.37 | |
| Expenses of Speakers..... | 862.91 | |
| | | <u>2,784.88</u> |

Publicity Expense:

| | | |
|---|------------|-----------------|
| Pamphlets, Cards, Letters and Circulars.... | \$2,447.86 | |
| Postage..... | 1,572.61 | |
| | | <u>4,020.47</u> |

Publication of Annals:

| | | |
|------------------|-------------|------------------|
| Printing..... | \$13,634.50 | |
| Reprints..... | 620.56 | |
| Postage..... | 916.24 | |
| Advertising..... | 138.00 | |
| Sundries..... | 8.50 | |
| | | <u>15,317.80</u> |

Investments Purchased..... \$6,000.00

Interest, Premiums and Commissions on above 414.06

6,414.06

37,365.60

Balance, December 30, 1911..... \$3,964.45

SCHEDULE "B"

Statement of Assets and Liabilities December 30, 1911.

ASSETS.

Investments.

| | | |
|------------------------|--|-------------|
| \$3,000. | St. Louis & Merchants Bridge Co. (1st Mtg. 6's—1929) . . . | \$3,000.00 |
| 3,000. | Penna. & New York Canal & R. R. Co. (4½'s—1939) | 3,000.00 |
| 3,000. | Wm. Cramp & Sons Ship & Engine Bldg. Co. (5's—1929) . . . | 3,000.00 |
| 5,000. | West Chester Lighting Company (1st Mtg. 5's—1950) | 5,000.00 |
| 3,000. | St. Louis, Iron Mt. & Southern Ry. (General Mtg. 5's—1931) | 3,000.00 |
| 3,500. | Mortgages (3 years at 6% dated Dec. 15, 1909) | 3,500.00 |
| 3,000. | Pittsburg, Bessemer & Lake Erie (1st Mtg. 5's—1947) | 3,000.00 |
| 5,000. | Lake Shore & Michigan Southern Ry. Co. (Dec. 4's—1928) . . | 4,801.25 |
| 3,000. | Market Street Elevated Passenger Ry. Co. (1st Mtg. 4's— 1955) | 2,786.25 |
| 5,000. | Choctaw, Oklahoma & Gulf Railroad Co. (Gen. 5's—1919) . . | 5,000.00 |
| 3,000. | New York Central & Hudson River Railroad Co. (Dec. 4's —1934) | 2,812.50 |
| 5,000. | Baldwin Locomotive Company (Sinking Fund 5's—1940) . . | 4,975.00 |
| 5,000. | Lehigh Coal & Navigation Co. (Collateral Trust 4½'s—1930) | 5,000.00 |
| 5,000. | New York & Erie Railway (2d Mtg. 5's) | 5,000.00 |
| Cash in Bank | | 3,964.45 |
| | | <hr/> |
| | | \$57,839.45 |
| | | <hr/> |

LIABILITIES.

None.

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TIMBER BONDS
AS
INVESTMENT SECURITIES

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TIMBER BOND FEATURES

BY T. S. McGRATH,

Chicago.

The business of loaning money secured by mortgage on timber lands is an old one and was extensively practiced before the timber bond came into existence. This custom of borrowing and lending led to the plan of making several notes for small amounts when the mortgage was large. The business gradually evolved the present system of issuing bonds to represent the divisions of the loan. The first mortgage protecting a loan on timber land should always be a prior lien on the property and the records must show the titles to be beyond cloud or dispute. The serial bond is the form most often employed when the borrower is an operating concern. If the borrower is not cutting wood or depleting the security, a straight term bond is more satisfactory. The form of bond and the terms of the mortgage will be modified to meet the current conditions. No hard and fast rules can be formulated to govern either the financial features or the technique of the bond. The legal phases of a timber mortgage are peculiarly subject to variation and each loan is a separate case. The timber must be cruised and the property valued by competent experts, and when the mortgagor is operating, the accounts should be regularly audited.

The purposes for which bonds are issued are to enable the makers thereof to borrow working capital, to buy and hold commercial forests, to so extend or body up the present ownership of their timber properties as to acquire enough raw material for future needs; to modernize mills and plants in order to eliminate waste, reduce the cost of manufacture and lower the selling price of wood products. When bonds are issued by new companies for the purpose of constructing mills or logging plants they should be subjected to the most rigid investigation. There are certain locations where additional production may now be safe. The capacity of equipment in the existing mills is amply sufficient to supply the present demand in most sections, and also any increase of consumption that is likely to arise during the next several years. Companies organized to exploit timber and

speculate in commercial forests are becoming numerous. They are selling bonds, stocks and profit sharing certificates with glowing paper prospects. They use the literature and arguments of certain well meaning but misguided enthusiasts, to show that an imminent wood famine is impending, which will multiply the value of their securities by enabling them to charge fabulous prices for the timber they may own. The offerings of these philanthropists should be studiously avoided.

The serial is a form of bond under which the entire amount of the loan is issued at the same time and certain portions of it, known as serials, are due and paid on named dates. This form of timber bond is attractive to banks and institutions who desire to place their funds for specific periods. The banks buy the early serials of timber loans and usually take all that mature during the first five years. Institutions wishing to place funds for a definite time, without danger of not being able to realize when their cash money wants arrive, buy serials that fall due around the date on which they will need funds. Investors buy the long time serials and straight term bonds. The old line, straight term bond, is issued on timber properties owned by holding companies or forest companies, and may run for any period from three years up. This bond makes a good investment for institutions and individuals.

The greatest opposition to the timber bond as an investment arose through a misunderstanding of the fire risk. Certain documents, speeches and writings carry many allusions to the damage done by fire in growing timber. Interested parties have circulated volumes of misleading statements that have been repeated in parrot style by hordes of pseudo experts and self-appointed guardians. The forester works the forest for a future as well as a present supply of commercial wood. He is taught to foresee the needs of to-morrow through the confusion of to-day. His educated mind and trained eye turn to the young growth on the timber land as the nearest source of raw material to provide the lumber and pulp requirements of a few years hence. He realizes the urgency of protecting this young growth from its worst enemy—the ground fire. The seed, the plantlet and the baby tree are precious to the heart of the true forester. His profession teaches him to protect them as that of the physician teaches the latter to protect the life of his patient. The doctor eternally writes, preaches and argues about being careful of our health

and guarding against germs and disease. The forester constantly and continuously cautions us against our careless use of timber and the danger of fire. The ground fire creeps along the floor of the forest and destroys seeds, seedlings and small young growth. It causes no loss in the mature timber, but it does menace the future supply.

The fire risk in merchantable timber is chiefly confined to certain localities, and as in the United States these sites constitute a small percentage of the total timber stand, the fire hazard can be eliminated from consideration as far as the bond buyer is concerned. Loans are not made on timber in a district that is subject to possible fire risk, but even in places where this danger is greatest, investments in mature timber are far safer than is generally believed.

The fire risk is not the greatest danger to the standing tree. Old age, insects, animals and fungi, combined with wind storms, ~~cause~~ more damage to timber than does the fire element. Our ~~federal~~ government spends large sums of money annually in supporting a bureau of forestry through which it supervises the forest reserves and distributes literature on timber conditions throughout the country. The bureau of forestry maintains in its employ a force of foresters and other experts. It also employs a number of men to act as forest rangers and fire wardens. In this way the national government makes heavy donations toward the elimination of the fire loss in ~~growing~~ timber. Some of the states also provide a forest patrol ~~service~~. It is unfortunate and to be regretted that certain men employed in the forest service devote more time to the politics of the position than to their duties. The forest ranger answers a useful purpose, and when he works within his legitimate province his services are valuable. When the forest ranger becomes a politician and a press agent he loses his value as a patrolman and conservator. But even at his best, the ranger cannot be compared in effectiveness or be placed in the same class with the silviculturist and the dendrologist in assuring a continuance of the stand of commercial timber. This fact will inevitably force itself upon the minds of the people when they commence to use their judgment in these matters and are guided by reason rather than swayed by sentiment.

In considering timber as security for bond issues the state, county and district of location must be carefully scrutinized. There are counties in certain states where the tax on timber is exorbitant and investors should not buy bonds secured by timber standing in those

counties. In valuing the security under a timber bond mortgage it is important that it be considered from the basis of quality as well as quantity. There are tree weeds which mingle with the useful varieties; so, to be safe, the loan must be secured by a good quality of commercial timber in an accessible location. This timber must not only be marketable, but of such grades as will find a ready sale at fair prices.

The unit of measurement in the timber industry is the "board foot." The board foot is a piece of lumber one foot long, by one foot wide, by one inch thick. By this unit is estimated the stumpage on timber lands, the capacity of mills, and all other transactions in the business. The number of cords or board feet on a piece of land will be governed by the size of the tract, the nature of the stand, and the kind and quality of trees. The number of logs in a tree will vary according to the height of the tree, and the quantity and quality of product that can be manufactured from a log will depend on the particular log. The character of the timber, the amount and quality of it, will vary with the species and site, also the selling and shipping of timber are much affected by the nature and location of the ground. The analyst, who investigates a timber loan for a bond house or a borrower, or who reviews and values a timber tract for an investor, can tell in a general way the varieties and quality of woods growing in a given locality and on a specified description; but before he can arrive at the definite value of a tract of timber, either for the purpose of making loans thereon or investing therein, it will be necessary for him to examine the tract and know the species and quality of timber and nature of the logging chance. The value of the timber will be governed not only by its stand and quality, but by its accessibility and the cost of logging. The cost of logging will depend chiefly on the lay of the land and the nature of the ground.

In addition to the physical property mortgaged as security for timber loans, the bonds usually carry the guarantee of some individual. When possible it is desirable that this guarantee should be that of an individual whose means are not connected with the business or allied industries. The reason for this, of course, is self-evident. This guarantee plan has raised the question as to what position the guarantee on a bond issue holds amongst the liabilities of the guarantor. It is now generally conceded that the guarantee on a bond issue would rank with the unsecured debts of the guarantor, occupying the position of a promissory note.

On operating properties a sinking fund calling for the payment of a certain amount per thousand feet or cord as the timber is logged or manufactured, is deposited with the trustee for the retirement of the serials as they fall due. The sinking fund should be sufficient to protect these serials, but it should not be so heavy as to cause hardship to the borrower. The amount paid to the sinking fund will be governed by the value of the timber, the capacity of the mills, the life of the loan and the size of the serials. There are two methods of paying to the sinking fund, and when properly managed, one is as good as the other.

In some loans a supplement called a "releasing list" is attached to the mortgage, describing by parcels and contents, the lands under the mortgage. When the operator desires to cut the timber on any piece of land, he indicates its description on the releasing list and pays to the trustee the amount of money shown as the value of this timber on the releasing list. The value of the timber is based on the cruise made for the bond issue, and any overrun at the mills is in favor of the operator. This system of paying to the sinking fund enables the operator to handle the timber on any piece of land as he sees fit. If there is any wood he desires to leave standing, he may do so.

Under the other system the operator pays to the sinking fund so much a thousand feet or cord on the output of the mills. Under this system the operator does not tell the trustee the timber he is to cut. Instead he renders a monthly or a quarterly statement, as the case may be, showing the output of the plant during the preceding month or quarter, and remits the sinking fund price for this amount. Under this method any overrun from the scale, as shown by the cruise under which the loan is negotiated, is in favor of the bondholder. The objection raised to this latter system is that a dishonest company operating under it could skin the property of the choicest wood, on the sale of which it would make a big profit. Disposing of this choice material at a price that would give a large return over the sinking fund requirements would enable the company to withdraw a great part of its assets from under the mortgage, and should default occur after a few years, the bondholders might find themselves with a rather worthless piece of culled timber land as the only means of realizing on their loan.

Both systems are used by the most conservative houses. On sectionized land the releasing list works very well, but on land that

is not sectionized, or on land on which for any other reason it would be a difficulty or a hardship to use this system, the plan of monthly or quarterly payments is more satisfactory to all concerned. Like all other rules, both of these have their exceptions and they must be used with judgment. Both are perfectly safe in proper hands, and neither of them is safe in incapable hands. It is certain that if the operators are dishonest they will endeavor to find some method of robbing the property regardless of the check system employed.

Both of these systems should be protected by clauses in the mortgage permitting the trustee to have the books of the mortgagor audited and its lands inspected at any time. An inspection of the land will show what portions have been cut over and what wood has been removed. This inspection will constitute a check of the cutover land with the cruise under which the bond issue was negotiated. A comparison of the original cruise and the timber left on the land will show exactly what has been taken off. An audit of the books will exhibit the financial condition of the company and show how much material has been credited to the cutover lands, which when compared with the original cruise and the present check of the lands, will quickly disclose any discrepancies, should such exist. These check cruises and audits made occasionally will protect the bondholders and make either one of the sinking fund payment systems safe in the hands of any operator.

In addition to the sinking fund paid on wood cut from its own land, should a company operating under a bond issue manufacture lumber or pulp from wood not cut on its own land, it should pay the trustee a certain toll on all such material manufactured, this toll to be for the benefit of the bondholders, as a rental for the use of the machinery and equipment held by the trustee under the mortgage. This charge for the use of equipment to manufacture raw material not taken from the lands under the mortgage will act as an offset to any desire that might exist to employ the plants to make profits on outside material.

When the sinking fund has on deposit more money than is necessary to retire the current serial, this money can be applied to the purchase and retirement of bonds from other serials. The mortgage usually provides that bonds can be called at a certain premium either for the reduction of sinking fund deposits or for the retirement of the loan. The premium at which six per cent bonds can be called should

be three points, the three per cent being sufficient to cover six months interest. In many cases the first intimation that a bondholder has of the call of his bonds is when he presents his coupons on the interest payment date. The interest dates are six months apart and, consequently, the premium should be sufficient to pay six months interest. Some bonds, of course, offer to pay big premiums when they are called for payment, but we are dealing here with a very conservative investment that returns a good rate of interest, carries the safest kind of security behind it, and on which it is not necessary to promise speculative premiums.

The bonds to be retired by excess sinking fund moneys should be taken from the next serials coming due. Some mortgages call for the retirement of bonds in the reverse of their numerical order, but this method is positively dangerous for the borrower, is of no benefit to the bondholder, and is always a hardship on the operator. No sound argument can be advanced to show why the borrower should retire a serial that does not fall due for ten years and still owe the full amount of a serial due in six months or twelve months. A railroad strike, an accident to the plant, or any one of a number of possible causes might render it impossible to accumulate enough money to meet the next serial, but the fact that a serial due ten years off had been paid and cancelled would not prevent a default under the mortgage and the possible foreclosure of the business. The necessity of retiring serials in the reverse of their numerical order weakens a bond issue, hampers the borrower and shows an unfair policy on the part of the bond house creating such loans.

When the six per cent timber bond first came on the market it was usually sold at a heavy discount. This discount was gradually reduced until during recent years it has become quite reasonable. As the timber bond became known to the investing public and as the methods of issuing such bonds and safeguarding timber loans improved, investors gradually grew to be bigger buyers of these securities. It is certain that for going concerns, under able management, and properly financed, six per cent is too high a rate of interest on timber bonds, and it is safe to prophesy that within the year 1912 the rate of interest on timber loans will become flexible. The best loans on operating properties will cease paying six per cent, whereas six per cent will continue as a fair rate on the non-operating properties of timber holding and forest growing companies and on

the properties of operating companies that are small and those that are not in the highest credit.

One of the objections advanced against timber securities in general and timber bonds in particular is that the supplies of raw material are being so rapidly consumed that the forests will be depleted within a very few years, causing securities based on timber to become extinct, and the houses that specialize in timber bonds forced to retire from business and, therefore, be probably rendered unable to protect loans that have been negotiated through them. These objections are built on the arguments of visionary propagandists and are not well founded. There are ample supplies of raw timber in this country to make the business a permanent one under careful management. Timber is becoming more inaccessible and it is proper that stumpage close to the great rivers and railways, the highways of commerce, should be cut before the wood that is remote from these avenues. It is only natural and just that the first man on the ground take possession of the choicest properties. There is enough timber in the United States to-day to make the timber bond stable and a perfectly safe investment.

The timber bond is the greatest insurance yet devised against a shortage of commercial trees. The timber bond furnishes the means for the large lumber companies to buy extensive tracts of stumpage, cut their timber and operate their plants in the most economical manner. Before the coming of the timber bond the lumber mills were owned by individuals, firms or small corporations who were not financially fitted to practice economy either in their woods operations or in their works. The timber bond renders possible the ownership of large holdings and warrants the installation by the operating company of a department of forestry to work in conjunction with the logging and milling departments. The timber bond enables the company to borrow money for long periods of time and permits it to manage the timber land so it can safely arrange for reproduction and future cuttings. The timber bond will provide the money for growing timber on absolute forest land in private ownership. The timber bond will preserve and perpetuate the lumber and pulp industries.

THE SCIENCE OF TIMBER VALUATION

By JAMES D. LACEY & Co.,

Timber Land Factors: Chicago, Seattle, Portland, New Orleans.

The investor in timber, for either a long term hold or immediate conversion into lumber, or the investor in bonds, secured by standing timber and operating plants, is entitled to receive the same intelligent report on the amount of raw material, its availability, quality, adaptability for logging and operating that a prospective purchaser of a coal field, irrigation project, water power or mine would expect to obtain. Many well known names of mining, water power and coal experts are almost household words in our own country, and abroad as well; while irrigation and water power engineers equipped by special study and training to prepare reports and estimates on projects requiring an expenditure of millions of dollars, are eagerly sought by investors in, and promoters of, such enterprises.

The layman who invests in a mine, in a water-power, irrigation project or coal field, does so because of his confidence in the ability, commercial standing and integrity of the specialist who has reported on the property under consideration. The bank, trust company, bond house or small investor, who buys the stock or bonds of such enterprises, has not the time or the facility to make a personal verification of the facts laid before them in advance of the securities going before the investing public; hence they are compelled to rely to a very great extent upon the reporting expert in each particular and specialized line. In the case of securities offered for sale by banks, trust companies and bond houses, the funds usually flow from a clientele who have implicit confidence in the judgment and integrity of the institution making the offering, and likewise the financial institutions and bond houses must employ the services of experts of recognized standing in their vocations for the purpose of examining the properties presently to be utilized as security. Obviously these experts should always be of the highest integrity, possessed of great experience, and in whose judgment the investor has the utmost confidence.

This bond of confidence being established between the fiscal

agent, representing the maker of the bonds, and the expert who passes on the security behind the bonds, on the one part, and the investor on the other part, it follows that the result is almost invariably satisfactory, in that the securities are handled at a fair measure of profit, and the buyers of them are satisfied with their investment, because of their faith both in the value of the security itself and the means adopted to determine it.

Our house was established almost thirty-five years ago by the present senior member of our firm, and during that period we have specialized in timber, timber securities and the correlated industries to the exclusion of everything else. In the first instance our attention was turned to the south at a time when entire townships of vacant government land were purchasable at one dollar and twenty-five cents per acre, and when it was generally supposed that the white pine of Michigan and Wisconsin had passed the speculative period of its history. Early in the decade of 1890, our activities centered in demonstrating the merits of cypress as a utility and specialty wood, and much of our time was devoted to collaboration with the patentees and pioneer manufacturers of the mechanical devices used in logging cypress, that have since played so vital a part in the amazing advance in its stumpage value.

The decade inaugurated by the year 1900 showed great advances in the stumpage value of yellow pine, cypress and all hardwoods throughout the country, while in the lake states the price of white pine stumpage became elevated to such a point that it could only be purchased as an adjunct to a manufacturing plant, erected for the purpose of immediate operation. During this decade the attention of lumbermen, capitalists and others was directed toward the forests of the Pacific northwest and British Columbia. The same decade witnessed investments, generally on the part of lumbermen, in tracts of high grade sugar pine in California and southern Oregon, or the utility woods of the northwest; notably fir, spruce, cedar and hemlock, which in the previous decade were not actively in demand. Dating from that same year, woods that had enjoyed no established commercial stumpage value, such as cottonwood, gum, and in many localities, hemlock, received their first recognition, and it was during this decade that timber bond issues were evolved and quickly took their place among the leading popular securities sought by the investor at a time of unprecedented prosperity in all lines of industry

in America and, except in isolated instances, throughout the older nations of the world.

This flow of prosperity continued with one or two minor setbacks until the financial disturbance of 1907 was precipitated upon the country. From 1900 until the present time timber bond issues amounting to millions of dollars have been successfully marketed at par, and occasionally premiums have been paid for the bonds of certain institutions.

The foregoing preface to the general paper which will follow, gives a brief resumé of timber conditions and timber bonds since 1890, and in passing, it is worthy of note that with one or two exceptions the makers of the bonds have met all obligations of principal and interest at maturity, without default; and that in no instance known to us have the expert's reports on the security back of the bonds themselves been found other than as represented.

In the earlier days of timber land investments when values were low and the basis of valuation was usually the public domain offered in bulk at the government price of one dollar and twenty-five cents per acre, or the entryman's "claim," necessity for careful determination of the volume of timber on a given acre was not known. It was then sufficient that the purchaser or his representative should go over the ground superficially and satisfy himself that the area under consideration was timbered. If all the factors which made for value were satisfactory, the purchase was concluded and the owner rested contentedly in the knowledge that he was early on the ground and that he had secured the best.

With increased stumpage values and the investment of large sums of money by capitalists and lumbermen who were attracted to the field by the profits earned through such speculations, came a demand for more detailed reports, particularly from investors who were not lumbermen or who were not possessed of the knowledge of timber values. Then came the development of professional "timber cruising" and "cruisers."

Beginning in the days when the white pine forests of Michigan, Wisconsin and Minnesota, and the virgin yellow pine and cypress forests of the gulf states, stretched away into the unknown, and men, alone or in pairs, disappeared beyond the limits of civilization, the evolution of the timber cruiser has continued down to the present time. In those days "land lookers" went forth to explore and re-

turned after weeks or months to report that on certain waters or in certain townships there were so many acres that would cut so many million feet of lumber. Often these early "land lookers" were unable to prepare figures or written reports. Their calculations were carried in their heads from day to day and week to week.

Then there gradually came into use various methods by which averages of the stand of timber on any given acreage were obtained, and more correct reports were turned in by cruisers. That certain sections would cruise about so many thousand feet per acre, with scant additional information concerning topography, streams, etc., was about the substance of such returns. This approximation was occasionally supplemented by some meager information about the logging conditions, and a brief description of the general location of the timber. As has been pointed out eventually the eyes of eastern lumbermen and capitalists were turned toward the forests of the Pacific Coast, both in the United States and British Columbia.

It is well known that the great commercial yellow pine forests of the south consist of open woods, usually free from underbrush of sufficient density to impede vision. The cypress is found in only commercial quantity in certain sections of Louisiana, Florida, Georgia and North and South Carolina; almost always in close proximity to the Gulf of Mexico, the Atlantic Ocean and bordering the sluggish bayous near their coasts. The southern hardwoods are more widely distributed, and owing to the mixed stand of timber are more difficult to estimate than either yellow pine or cypress, for in the latter type cypress constitutes the principal forest stand, and the cruiser's attention is not diverted to multiplicity of species. It has only been within the past few years that tupelo gum, the under-forest of cypress, has been taken into account in cruising.

The same element of technical skill in estimating that is now employed on the Pacific Coast would be superfluous in most estimating contracts in the south, due to the uniformity of species and stand of timber in the southern forests, and especially due to the absence of serious topographical obstacles that would bear upon the economies of logging. It is true that in many of the southern states, even apart from the Appalachian and Ozark ranges, and their foothills, localities exist where the nature of the ground would tend to greatly increase the cost of logging, in comparison with timber on the so-called "flat woods" or on slightly rolling ground, but broadly

speaking, the commercial forests of the south stand upon ground highly favorable for economical logging. The technical text of this paper will relate chiefly to methods adopted by us in the west, including British Columbia, Washington, Oregon, California and the states embraced in the inter-mountain region. When conditions are encountered in the south similar to those existing in any of the above mentioned localities, the same methods of procedure that we follow in the west can be put in practical operation.

At the time we entered the western field we put in use a system of cruising which involved an actual tree count on a given number of strips—usually two or four, across each forty acre subdivision or "forty." Our cruisers attempted to count and classify the trees on strips a "half-tally" (62 paces, or 55 yards) in width on either side of compass lines followed by the estimators. This innovation was viewed unfavorably by those who still clung to the past. Although even such a system in the light of the present was comparatively primitive, time and the methods in vogue among practically all western estimators to-day have proven that it was a step in the right direction. But the errors found in such work, due in part to the heavy undergrowth in most western forests, compelled modifications in this system as our experience increased, until the method followed by us at this time was developed.

Nor was it sufficient that the system alone of cruising should be developed. In addition the problem of finding men of sufficient intelligence and education to adapt themselves to the changing conditions was no easy one. However, the inevitable evolution has continued, until to-day it is no uncommon thing to find throughout the west expert timber cruisers who are graduates not only of the forest schools of recognized standing, but of many of the leading eastern universities. They are not men of theory alone, as some might suppose. They have gone into the timber as loggers, packers, clerks or compassmen. They have lived the life and done the work of the woods; they have endured the hardships and privations of the remote wildernesses of British Columbia and suffered the trials incident to cruising in the Sierras, at a high altitude during the rigors of winter. After such apprenticeship they have emerged woodmen with trained minds and an ability to tell what they have seen, in addition to an expert knowledge of timber and timber values. Men of such intelligence and of proven integrity have done much to make

timber cruising a profession in the true meaning of the word. Their skill and their conscientious efforts have not only won the confidence of their employers, but added greatly to the safety of investors in timber securities who risk annually millions of dollars upon the honesty and sound judgment of timber estimators.

To establish uniformity in estimating and enable any competent cruiser to determine the contents of trees with accuracy, volume tables were compiled to show the number of feet, board measure, of lumber contained in trees of different diameters, heights and forms, according to adopted log scales. From time to time these tables have been perfected in detail in order to meet the exacting demands made upon them.

To insure regard for rules laid down to govern the work of our men on particular tracts and under particular conditions, head cruisers are selected because of their wide experience in all lines of timber work, unquestionable integrity and sound judgment. Upon these men is placed the responsibility not only of directing the work, but of checking the estimates turned in to them by their crews. Having a tract of timber to cruise after the most accurate manner practicable in consideration of cost, we first send an expert woodsman, preferably the head cruiser who will be in charge, over the tract to fix upon a general plan of operations and prepare a preliminary report on the character of the timber. This report is the basis of the instructions issued to the cruisers. Survey crews are then sent to the tract to locate the corners and lines, established perhaps many years before by government surveyors, and to survey and plainly mark out the minor subdivisions; also to set "tally stakes" for the guidance of the cruiser's compassmen.

When this work is well under way the cruisers are sent in and the actual estimating of the timber begins. As has been suggested, the head cruiser in charge has familiarized himself with the lay of the land and the general conditions which are to be encountered. He has, as it were, planned the campaign; he has decided upon the approximate location of his camps; he has arranged all the numerous details which insure the smoothness, the economy and the effectiveness of the contract.

As in all work, men demonstrate special adaptability along certain lines, so it is with cruising. With a knowledge of each man's individual fitness for work in varying kinds of timber and under

different conditions, the head cruiser gives to each a separate assignment.

Assume, for the sake of clearness, that camp has been established near the corner of sections 23, 24, 25 and 26. "A" has been assigned to estimate the east half of section 23. "B" is his compassman. Before leaving camp the two men look well to their equipment. "A" makes sure that he has his tape—generally a fifty foot steel diameter tape—his volume table, his small celluloid pad, his pencils, his tally registers used in counting the trees, and his hand-axe, which he uses freely in sounding the timber, ascertaining the thickness of the bark and chopping into the wood to study its texture and the thickness of the sap. Meanwhile "B" has set his aneroid barometer at the known camp elevation and adjusted the vernier of his staff compass to the variation established by the surveyors for the lines on Section 23. He takes his Jacob's staff, his celluloid pad and his pencils.

The two men make sure of their location at the southeast corner of Section 23. The surveyors have previously subdivided the section and set the tally stakes 62 paces, or one-half tally, apart on the north and south boundaries of the section and on the one-quarter line running east and west. As this is to be an eight-run tree count cruise, the estimator taking all merchantable timber included within a strip 31 paces on either side of his compass line, the first stake must necessarily have been set 31 paces west of the east boundary of the section and numbered in consequence "tally one-quarter west." The second stake being 62 paces, or one-half tally, further west would be numbered tally three-quarters west, or "T $\frac{3}{4}$ W" for brevity.

It is obvious, therefore, that "A" and "B" must work the section north and south. That is, their first run will begin at "T $\frac{1}{4}$ W" on the south line of the section and they will proceed northward on their compass line, checking the width of their strip and the variation of their compass needle on similarly marked stakes on the one-quarter line and the north boundary of the section.

Arriving at the north line, they will set over 62 paces to the west to "T $\frac{3}{4}$ W" and in a similar manner carry their line southward. In this way they will traverse the section back and forth, a mile one way, set over to the next stake and return a mile. This two-mile run, which completes the estimate upon forty acres, constitutes an

average day's work under ordinary Pacific Coast conditions. It may, in fact, be regarded almost as a minimum, for the men cover from three to five miles depending upon the density of the timber, if the ground is smooth and free from brush. Only under the most unfavorable circumstances does a cruiser fail to make a report upon less than two miles. Strip by strip not only this entire half section, but in the same manner the whole tract is ultimately worked. Every tree is counted and estimated according to its individual value, the character and quality of each species in each locality is carefully recorded; each topographical feature; the natural outlet for each group of lands; each ascent or descent of one hundred feet in elevation is noted as accurately as is possible from barometric readings and all is permanently transcribed.

But we are getting ahead of our story. We left cruiser and compassman at T $\frac{1}{4}$ W on the south line of the section.

Before "A" actually begins the work of estimating the timber, to make sure that he has judged correctly the width of his strip, he has his compassman measure off 31 paces, or $82\frac{1}{2}$ feet, on each side of the compass line. This is most important and is frequently repeated as the work progresses, as a check upon the accuracy of the estimator's eye. It is astonishing the degree of accuracy an expert cruiser attains in judging distances.

Next the cruiser "sizes up" his timber. He endeavors first to find windfalls of each species, which are representative types. If this is possible he measures the down tree with his tape. He ascertains the exact butt diameter, having chopped away the bark, and the diameter of each succeeding 32-foot or 16-foot log according to the basis of the estimate. By this method he is able to compute from the standard log scale the exact volume of the tree, taking it log for log, the average taper and the number of merchantable logs it contains. He uses these fallen trees as a standard of comparison by which to judge of the contents, the height and the taper of those standing. His experience has taught him that trees of approximately the same age, growing under the same conditions, will attain to approximately the same height, and will maintain the same volume and taper. It is vital to the accuracy of his work that the cruiser keep careful watch on the changing age, conditions and types of the timber through which he passes in the course of a day's work. Unconsciously he expects to find the tall clean timber in the draws or on

well protected benches; while on the poorer exposures his woodsman-ship prompts him to look for the shorter and more imperfect specimens. In a country notoriously free from windfalls, as is frequently the case in the western pine, the estimator often carries some one of the numerous mechanical devices designed to determine the height of standing timber. His steel tape is always in use as an aid and a check to his trained eye in arriving at the butt diameters. Experience has made the expert cruiser a good judge of taper—given him the ability to see at a glance whether a tree holds its size well up into the branches or whether it tapers off rapidly and fails to contain the amount of lumber that its butt diameter would indicate.

Years of practice have imprinted indelibly on the mind's eye of the competent cruiser certain forms and types and sizes, which to him represent certain known contents, and subconsciously these form standards of comparison upon which he bases his estimate upon given trees. By frequent reference to his volume table he has come to know, for example, that a tree 24 inches in butt diameter, containing three 32-foot logs with an average taper of 4 inches to the log—will cut 1,000 feet board measure, also that a tree 31 inches in diameter, four logs high, with a 5-inch taper contains 2,000 feet. Such standard trees, it must be remembered, are simply an index upon which to work, a rule of thumb, as it were, to systematize and simplify the work of the estimator and to add both speed and accuracy to his efforts. In other words, they serve to standardize his judgment. Should he find trees defective or malformed, he must deduct accordingly. Further, should he find trees that are seriously affected by fungi or any similarly serious diseases peculiar to certain species, he disregards them entirely. Often such trees will cut considerable good lumber, but the failure to include them in the estimate will be offset by hidden defect in some of the timber estimated. One approximately equalizes the other.

After the estimator has gotten a sufficiently good line upon the different species of timber in which he is working, he slowly follows his compassman across the allotted "run," working back and forth among the trees, counting, measuring, estimating, always keeping in mind the width of his strip. He places his figures for each species, tally by tally, upon his celluloid pad, makes mental and frequent manual note of the logging conditions, the fire risk, the soil—in fact, each and all of the many features that bear directly upon the value

of a tract. Consequently, when he has completed his work upon a given section he can write an intelligent report upon what he has seen.

One of the most modern and essential ramifications of the profession of estimating timber, and the one upon which we lay particular stress, is the correct grading of the various species. Our cruisers are instructed to use the greatest care in this part of the work and the results of their efforts along this line are closely checked by the head cruiser. The importance of this branch of cruising is at once obvious when it is known, for example, that in the Pacific northwest a difference in the grades of logs means a difference of from three to six dollars per thousand feet board measure on the open market. In other words, a tract of high quality timber is conservatively worth from three to six dollars per thousand feet, when its products are marketed, more than a tract of poorer quality. Pursuing the argument, it is apparent that paying a good price for good quality standing timber is a more profitable investment than paying a slightly less price for a tract that will only cut out the commoner grades.

In estimating, therefore, the cruiser must keep a vigilant eye to the quality of the timber through which he passes. It will not do for him to simply report that the "fir is of fair quality." He must tell, as nearly as it is possible to tell, just how much per cent of No. 1, how much No. 2 and how much No. 3 the fir will cut. He must be guided by the grading rules in force for each species in the market to which the output from the particular tract will eventually go. And to this end he has a very tangible system by which to arrive at his conclusions. As suggested, he must be familiar with the grading rules which apply, in average trees of each species he must carefully note the number of logs which will go into each grade, and then by referring to the modern volume table which our men are required to use, he can see just what per cent each log bears to the entire contents of a tree of given dimensions.

However expert and conscientious "A" may be, the results of his efforts alone are not accepted as final. It is one of the duties of the head cruiser on a contract of this kind to keep a careful check upon the work of each of the men in his crew. The aim is always to have upon any one piece of work not more than five cruisers at most. With a crew of this size the head cruiser can make frequent runs over ground previously estimated by the different men. He

compares his figures, the tree count, the volume, the grades, and the general notes, with the results turned in by "A," for example. Should there be a discrepancy between the two estimates of more than ten per cent, "A" is required to recruise his former work. Should there still be an equally serious variance, either in tree count or volume, "A" and the head cruiser go over the same ground together in the most careful manner. If necessary, trees are felled and measured when down, in order to settle disputes. Finally, if "A" cannot or will not be convinced that he is evidently in error, the superior experience and the tested judgment of the head cruiser must hold. "A" must retire.

The work of "B" the compassman, aside from the running of compass-lines, pacing and assisting "A" in measuring the timber, consists in taking the topography and gathering the data necessary for the building of a complete map of the tract. Equipped as he is with an aneroid barometer, he records upon his pad the elevation at every tally, and as his work progresses, he joins by a line, known as a contour line, all like elevations representing an ascent or descent of one hundred feet. Water courses, the outlines of burns, openings or brush patches; the location of buildings, logging works; in fact, all features of interest to the tract are marked upon his miniature map. The daily notes of each compassman comprise the units which are later combined into a topographic picture.

With the record of their day's work on their pads, cruiser and compassman return to camp, where during the evening their original work is transcribed by the clerk. Exact copies of the figures of each cruiser upon each tally are put in permanent form, in duplicate. Each cruiser writes his notes and grades also upon permanent blanks and in duplicate. The originals of these reports are forwarded to our district offices, the duplicates being preserved by the clerk in camp to guard against possible loss in the transmission of the originals.

Likewise the topography from the celluloid pads of the compassman is drawn by the clerk upon a working map. As this map grows and large areas of it are completed, they also are forwarded to the offices.

As the work from the field comes in it is classified, checked and re-checked by the office force. The cruisers' figures are totaled and detailed reports covering each section by forties are prepared, showing the number of trees of each species, their average length, average

contents, total volume, and percentage of each grade. The logging situation, character of each species of timber, fire risk and a general description of the conditions surrounding the particular section in question, are gone into at length.

Complete maps are compiled from the original field notes of the surveyors, showing the exact acreage of each section or subdivision and defining any irregularities that may exist in the official government survey. Such acreage maps are supplemented by contour maps based upon the original notes of the compassmen taken in the field. A glance at one of these maps makes clear the drainage and the principal divides; a careful study reveals the natural outlets for the logs, the most feasible routes for rail and skid roads, the smaller leads and gulches, the approximate degree of the slopes, the well timbered areas and the openings.

Possessed of the detailed reports of the estimates, the acreage and the contour maps, and in addition, a general report by the head cruiser in charge, covering the availability of the tract, an analysis of the timber and the conditions surrounding it, the logging chance treated broadly, and a description of any existing improvements upon or in the immediate vicinity of the lands; possessed of all this information, the local representative sets about to prepare a report in the name of the company dealing definitely with the values of the property under consideration. Frequently he must personally gather first-hand knowledge of matters which bear directly upon the tract and which by their very nature cannot be covered by the cruiser's reports. Familiar as he is with the conditions which make for value, in the territory in which he is accustomed to operate, he is competent to dwell with authority upon the worth of each species of timber shown in the estimates, taking into consideration its quality, its accessibility and the markets which await its ultimate cutting. He can hazard a shrewd guess at the approximate value of the land after the timber has been removed; he can make a close estimate of the working value of whatever logging equipment may be on the premises, and he can venture a description of mills, and in fact, any other improvements of value that may be allied with the timbered holdings. In these days of varied and complicated operations, however, it is obviously the work of appraisal and audit companies, supported by mechanical experts, to fix upon correct valuations and earning capacities.

With all this fund of information laid before the man of capital, information gathered by a corps of men in the field, each an expert in his line, whose integrity has been proven: figures, maps, reports—it matters not whether this capitalist be a lumberman or a banker or a merchant. He has something definite and tangible upon which to base his decision.

He is not simply told that "the area under consideration is timbered," or that "on certain waters there are so many acres that will cut so many million feet of lumber." The actual facts and figures and maps are before him in detail. They tell the story, whether it pertains to timber north, south, east, or west, and with as much pertinency to spruce in Quebec as to redwood in California, cypress and yellow pine in the south, to hemlock and hardwood in the lake states.

In conclusion, we wish to point out that numerous factors other than immediate local conditions must be taken into consideration by the investor in timber or timber securities. Obviously the laws of supply and demand as related to production of raw material are important. Wood is the product of years of growth, and our existing laws and public policies have not yet been developed to a degree which lends encouragement to the production of timber as a crop. We must, therefore, investor and security holder alike, place our reliance to a great extent upon a rapidly diminishing visible supply, the ultimate value of which will be limited only by relative values as between wood and wood substitutes.

In a paper as concise as this, it is impossible to touch upon every head bearing upon the value of timber, and the methods employed to establish it, but it must be borne in mind that the increase of stumpage values may be properly compared to the increase of realty values in and about populous centers. In the beginning the land is farmed; then it is subdivided into acreage, and eventually into town lots, the value of which increases as the demands of society bring about more intensive occupation. It follows then, in the case of timber holdings, that the investor should have in mind a well-defined purpose when such an investment is selected. Timber available for immediate demand has greater value than has that which is remote and which will not be used until years have passed. All of it will eventually be required, and an increase in value is absolutely certain, yet the same factors which make for value and profit at this time

will bear upon future values and profits, possibly to an increased degree.

Inside business property has a more or less fixed, realizable value at all times, while outlaying acreage is dependent in a great measure upon the ebb and flow of prosperity; and the same rule applies to timber, though the future demand for the latter is much more certain.

Availability and quality are, and will be, therefore, the governing factors in stumpage values; yet the investor in timber, or bonds secured by timber, should not lose sight of the factor of adaptability as related to species. And with these potent qualities should be combined another important consideration, namely, the volume of visible supply.

As an illustration, it may be pointed out that the diminuation of the hardwood supply of the United States is causing concern among manufacturers. Canada now draws upon us more heavily from year to year; there is no western hardwood to fill the need; future supplies must come from the Orient, or undeveloped foreign countries, such as South America. The once abundant white pine of our northern states is practically extinct. In Idaho there is a comparatively small area covered with a similar species, the value of which has already ascended to five dollars per thousand feet where railroad development has made it available. Every million feet of yellow pine cut from the forests of the southern states brings us closer to the yellow pine forests of the inter-mountain region; every day's issue of newspapers marks an advance toward the spruce and hemlock of the northwest, and so on through the entire list of species.

The supply cannot increase; the world's demand upon our forests cannot decrease. This briefly is a certainty to which students of economics will give thoughtful consideration.

QUESTIONS OF LAW ENCOUNTERED IN TIMBER BOND ISSUES

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It will readily be seen that it is not the purpose of this paper to give instruction in the various questions of law that arise in the course of preparing a timber bond issue, but merely to suggest some of the many questions that must be confronted in every issue of such bonds, and the procedure with reference thereto.

The first inquiry made by the bonding house that is asked to bring out an issue of timber bonds is as to the security for the issue. This comprehends, first, the moral standing of the proposed borrower; second, the amount and value of the property that is to be mortgaged to secure the payment of the bonds, and third, the title to this property. Sometimes all of these things are investigated contemporaneously, but as a rule the expense of the examination of the titles is not incurred until after the cruise of the timber has proceeded far enough to indicate that the amount of the security will likely prove satisfactory.

Early in the history of timber bond issues it was not unusual for the purchaser of the bonds to depend upon the correctness of abstracts of title that were furnished by the borrower, and largely upon the opinion of the borrower's local attorney as to the validity of the titles. At first impression this appears to be a safe method of doing business, as no one can be quite as much interested in seeing that the titles are perfect as the owner himself, and no lawyer from a distance can know as much about the titles as can one who has for years lived and practised law in the vicinity. But the very information which is gained by familiarity with the titles themselves oftentimes leads to disadvantage in connection with a bond issue. The local lawyer may and often does approve titles on his own knowledge of their condition. The bond house must not only know that the titles are good, but must know that the records show them to be good. Otherwise it would soon have to go out of business for want of buyers. For, notwithstanding the reiterated statement that investors are

like sheep and the just-as-often-repeated allegation that capital is timid, yet not only the public at large but particularly investors know that real estate titles are properly matters of official record, and but few are to be found who would be willing to buy a bond based upon timber lands to which the titles were in doubt. The very fact that an investor seeks or accepts a timber bond indicates that he is relying upon the fact that the mortgage to secure its payment creates a lien thereon, and as a rule a first lien; and this can only be done by the record. The vital question, therefore, is, what do the records show? The maker of the bonds may be of the highest standing; every other surrounding circumstance may commend the bonds, and the timber may be abundant and worth many times the bond issue, but it matters not how valuable the timber may be, the bonds would be worthless as timber bonds, and the mortgage would create no lien to secure their payment, if, in fact, the maker of the mortgage did not own the timber. Property owned by one person cannot be taken for another's debts merely because that other person may have claimed it. If there be one point in connection with a timber bond issue that cannot be waived, it is that of title. Everything else depends on it, and if the titles fail the issue fails.

The necessity is manifest, therefore, that every care should be taken in connection with the inquiry as to who owns the property. In sectionized land titles to large areas have been lost by the changing of one letter or of one figure. Section 22, Township 1 N., Range 6 E., is an entirely different six hundred and forty acres from Section 22, Township 1 S., Range 6 E.; and Section 22, Township 1 S., Range 6 W., is still another six hundred and forty acres, and seventy-two miles removed from the first description. It does not require cupidity to mistake an N for a W, or an E for an S; or even to confuse a 5 with a 3, or 6; or a 3 with a 2. Especially where the records have not been kept by skilled clerks is it easy to make mistakes in such figures or letters. Not only so, but it is possible for various reasons for an abstractor to overlook a mortgage or even a deed that may be of record. He may have inadvertently turned two pages at once. His attention may have been diverted and upon returning to the work he may have skipped a conveyance; or, relying upon the indices, as far the greater number of abstractors do, he may have failed to note an instrument because it was not properly indexed, or perhaps not indexed at all. It may be that the abstractor is not

a competent real estate lawyer, and he may therefore not know what may properly be omitted from an abstract and what it is important should be included. Or he may be ignorant of the significance of other things that to the experienced investigator might affect the title.

A few illustrations will suffice. On the table on which this writing is being done there is a memorandum showing the following items that were omitted from abstracts that were furnished as correctly showing the condition of the titles to lands that were offered as security for bond issues: A \$10,000 mortgage was omitted in one instance and a \$2,000 mortgage in another. A judgment for \$2,400 which was a lien on the land had been overlooked by one abstractor, and a \$600 judgment by another. Three tax sales escaped notice in one batch of abstracts, and one or more in many others. In fact it is quite common for delinquent taxes and tax sales to be overlooked. In an abstract quite honestly, painstakingly and elaborately prepared thirty-six mortgages were omitted, because the abstractor thought they were barred by the statute of limitations. He was mistaken in the law. As a matter of fact, they had been paid, although not cancelled of record. But a properly prepared abstract should have shown them even though they had been both cancelled and old enough to be barred. A deed which was signed by several persons was omitted, because it had been indexed under the name of only one of the grantors, and not the one through whom the abstractor was tracing his chain of title. A condition appearing in the face of the deed, and which defeated the conveyance, was omitted, the abstractor not knowing its importance. Recitals in a deed which under the law put a proposed purchaser on notice, or at least required him to make further inquiry of facts not shown on the record, were deemed of no consequence and found no place in the abstractor's notes. And it is so common as to be the expected thing that abstracts shall omit to call attention to defects in the certificates of acknowledgment to conveyances, although most states require such certificates and in many states the conveyance is void unless the statutory certificate be followed.

Absolute accuracy is requisite for a correct examination of titles. The only way to assure this is first to employ as accurate a person as can be found, and then to have the work checked and rechecked until the possibility of mistakes is reduced to the minimum. The correct method of doing this is for the owner to furnish complete

abstracts of title compiled by some reputable abstractor or lawyer in whom he has confidence, and for the bond house to have these abstracts checked by persons selected by itself, and who have established a reputation for accuracy and thoroughness in matters of title. The mere fact that the work has been accurately compiled and thoroughly checked is not sufficient. The investor wants to know upon whose work he is relying. If assurance cannot be given him that this accuracy is vouched for by some person known to him either personally or by reputation, to be experienced and thorough along these lines, then the investor will probably prefer to buy other bonds that are vouched for by some one whose work he knows can be depended on.

The above proceeds altogether upon the presumption that no conscious effort is being made to deceive the bond house and get it to accept an incorrect or incomplete abstract of title. And yet it is possible for even claimants of timber lands and proposed makers of bonds to be secured thereby not to make full disclosure with reference to their titles. A case is in mind where a man of good standing applied to a timber bond house to underwrite a \$500,000 bond issue on a body of timber worth many times the proposed issue. The terms were satisfactory, and he produced beautifully prepared abstracts showing perfect titles in himself. The deeds to him were quite recent, and he frankly explained that he was just becoming interested in the properties, that the titles had been deeded to him as a matter of convenience, and that the person who had made the conveyances to him was really the "big man" in the enterprise, but that this "big man" lived at a great distance and was too much engrossed with other affairs to handle the detail of the bonding transaction, hence his intervention. He wanted \$75,000 or \$100,000 on a temporary mortgage within thirty days, but the remaining \$400,000 or \$425,000 could take the usual course, incur the delay incident to printing the mortgage, lithographing the bonds, etc., just so it should all be paid within six or eight months. Investigation developed the fact that the abstract was fraudulent; that the "big man" had purposely procured not merely one but many conveyances to be omitted therefrom in order that it might indicate that he had a clear title to the property, whereas he had merely bought what is known as a "wildcat" claim from a regular dealer in fraudulent titles; and he had then duped a mining engineer of good standing

to go into partnership with him ostensibly to work the minerals with which the land was underlaid; had deeded the lands to the dupe and had him to take up the question of bonding the property and of applying for the short time loan of \$75,000 or \$100,000. If it had been procured, the "big man" would have been \$75,000 or \$100,000 ahead and would probably never have been heard of again.

It may be considered either queer or merely a coincidence that, since the preceding sentence was written, another concern with a high sounding name on beautifully engraved stationery has applied to the same bonding house to which the above tract was offered, for a temporary loan of \$100,000 on 621,000 acres of land, preparatory to a \$5,000,000 bond issue to be floated as soon as the development work shall be well under way. This application was accompanied by exhaustive reports on the timber, coal, soil, climate, transportation facilities, and in fact everything that would naturally be taken into consideration in the making of a bond issue. There were also numerous photographs showing the timber, coal openings, and the operations in both. A map of this empire was also appended; and, of course, a beautifully prepared abstract and certificate thereto showing not a fly speck on the title of the company-with-the-steel-engraved-name. And yet this 621,000 acres included two-thirds of the same land that but sixty days ago was claimed by the man wanting the \$75,000 or \$100,000 temporary loan, although the literature (in the Carnegie libraries it could be classed under "fiction") of this steel-engraved-company showed that it had owned the land for years.

The 621,000-acre man had overdone his work, however, as the picture of his domain shows railroads running through his kingdom which were not there last week, when the writer hereof happened to have been through that territory.

The fact is that neither of these claimants owned the land on which they sought to float bond issues, and for want of a better name they might be called "promoters." They had heard that some bond houses accept abstracts of title that appear to have been intelligently prepared, so they presented abstracts in the preparation of which intelligence predominated. They were beautiful. Just a few years ago these plans might have worked, but bond houses are more careful now than they were then.

If either of these schemes had been successful, that bond house would not only have lost the entire amount of the issue, but ~~would~~

the scandal had been hushed up, its prestige would have been seriously impaired.

What is considered the importance of this particular phase of title examination will be made the excuse, even should it not by others be considered a justification, for one more illustration. A person who proposed to float an issue of timber bonds presented well prepared abstracts showing clear titles. Upon investigation it was learned that by a change of county lines a large portion of the property involved had for a number of years been in a different county. The abstract took no note of the records of this other county. Fifteen conveyances were found therein which affected the titles to the land under consideration.

It may, therefore, be considered as now settled that the bond house should have the original records investigated under its own direction; and the maker of the bonds should desire it to be done, for if default should be made in one timber bond because of failure of title it would materially affect the market for future issues for a long time to come.

As an illustration of this, the defaults that were made several months ago in a couple of irrigation bond issues utterly ruined the market for that class of securities. This went to such an extreme that many irrigation projects of unquestioned value and security were unable to finance themselves on any terms. One is now in mind that has property worth \$1,500,000 and, with income that will pay interest on \$2,000,000, wanted to borrow \$500,000 for further development of its property, each and every dollar of which would have increased its income. The four principal stockholders, who were worth over \$1,000,000 each, and an aggregate probably of \$6,000,000, stood ready to personally guarantee the payment both of principal and interest on the bonds. But the recent defaults in irrigation bonds had wrecked the market for that class of securities. The timber market is probably as sensitive.

What has been said presents a question largely of practical consideration and may therefore be considered as a departure from the subject assigned, but it is so common to leave matters of title and all kindred questions to the determination of counsel that, whether merely practical or both practical and legal, the whole question of titles has to be handled by the lawyer, and is properly a question for his consideration.

Another question closely akin to the preparation of the abstracts, is, whose opinion shall be sought on the titles to the property to be covered by the mortgage.

The lawyer living in the county where the property lies may be just as able, honest and painstaking as any one who could be selected by the bond house. The ultimate investor, however, can hardly be acquainted with the ability and standing of these lawyers in various parts of the country, and as the lawyer's opinion is the only guaranty there can be that the titles are good, and that the mortgage creates a first lien on the property described therein, it is natural that he should hesitate before purchasing bonds, the value of which depends altogether on the honesty, ability and care of a lawyer of whom he has never heard; and many decline to do so.

Illustrative of this tendency, a short time ago a well known bond house brought out a large issue of timber bonds and, which was unusual, every bond was sold by the time they were ready for delivery. Some comment was caused by the fact that another bond house that usually confined itself to municipal issues had subscribed for \$100,000 of these timber bonds. It was shortly explained in a letter from the purchaser stating that he had bought the bonds because the prospectus showed that the entire proceedings, including the examination of the titles, had been conducted by a lawyer whom he knew and on whose opinion he was content to rely.

Both the maker of the bonds and the house that brings them out are interested in having as wide a market for them as possible, as the more contracted the market the lower price they bring, and the wider the market the higher the price. The result is, therefore, that the better bond houses have learned that it is cheaper for the maker of the bonds, and more profitable for the underwriters, for all the legal work, and not merely the drafting of the bonds and the mortgage, to be done by well known experts in that line. This includes both the examination of the original records and the opinion on the title as well. For notwithstanding the abstracts may have been accurately compiled by the local abstractor, yet he and his work are unknown to the investor; and no matter how able and well known the attorney may be, his opinion on the titles could be no more reliable than the abstracts upon which his opinion might be based. Regardless of the ability and honesty of the local lawyer, there may be and there are liable to be matters

of record that could more judicially be passed on by some other person.

As a rule, persons proposing to issue bonds are of opinion that their titles are perfect, and rather resent the critical examination to which they are subjected; but it is seldom that they are not converted before the transaction is closed. A case is now in mind where some really competent business men, who had for many years owned the property which it was proposed to make the basis for the securities, stated that their titles had been looked after by a certain lawyer of more than local reputation; that they always consulted him about every step taken, and they expressed the opinion that it should not be necessary to incur the expense of the re-examination of the records by other persons. Before that transaction was closed more than a hundred unrecorded title papers—some of them mildewed so they could hardly be read—were fished from their vaults and filed for record. Their titles really were good, but the records failed to show it. Needless to say, their lawyer had not attended to the registration of their muniments of title.

In another instance, the proposed borrower scarcely concealed his resentment at what he considered an unnecessary and almost impertinent investigation of his titles, asserting that his secretary was a skilled conveyancer and had personally attended to the details of his titles for several years past; yet, as one result of that investigation it was disclosed that there was a serious claim of title outstanding to the site on which he was preparing to erect a most expensive mill. As this disclosure came before his mill had been erected, he was able to purchase the conflicting title for a comparatively small sum. What it would have cost him if the mill had been built before the defect in title had been discovered, is a matter of conjecture. The effect was, however, to cause him immediately to employ expert title attorneys to examine the records pertaining to all his other property—quite a large area—and he did not further object to the work of the attorneys representing the bond issue.

Recently a proposed borrower assented that an attorney for a bond house should examine his titles, but stated that as they had shortly before been approved by a prominent local lawyer who had formerly been a district judge, and who, at the time, had just been nominated for a place on the supreme court of his state; that it would probably require but slight investigation to satisfy the proposed bond buyers.

It proved another case where the local lawyer knew that the titles were good but where the records failed to show it. The lawyer had lived in that community for fifty years, and had for almost equally as long been the attorney for most of the old settlers, from whom the greater portion of the lands had been bought. He knew that Jane Jones, the wife of John Jones, and Sarah Brown, the wife of George Brown, were the only heirs of Hezekiah Robinson, who died ten years ago, and that they had made an oral partition of Hezekiah's property, by which Jane got the mansion house and contiguous fields while Sarah took the timber land for her portion. He also knew that Ben Johnson had paid off the \$5,000 mortgage to Samuel Thompkins, for it had been paid to him as Thompkins' attorney. He also knew that the deed of May 16, 1896, conveying to Edward Jernigan a tract of land bounded on the north by the lands of Josiah Higgins, on the east by Dwight and McLeod, on the south by Miller and Zarecer, and on the west by Slemons and O'Connor, described the same property which Jernigan sold in 1902 to Robert Keeble, although this latter deed described it as bounded on the north by the county road, on the east by Rust and Stockell, on the south by Blake and McVeigh, and on the west by Wynns.

The judge was doubtless right in his recollection of these facts, and his opinion that the person who proposed to issue the bonds could make a good title was correct; but the trouble was that the judge's recollections were not official records, and it took six months to reduce these facts to record form.

Answer may be made that, as a matter of fact, the titles were good and that the bonds would really have been secured by a mortgage on the property. That might be so, but unless it can be demonstrated in some manner known to be reliable that the title is good, and the records are for that purpose, investors will not buy the securities, and should there be foreclosure no one would pay a fair price for the property.

Contemporaneously with the investigation of the titles of the property to be mortgaged, the attorney representing the bond house will take up many other questions, some of which are indicated below.

If the bonds are to be issued by an individual, it is, of course, known that no investigation need be made to ascertain his right to issue them; but should it be intended for a corporation to make the issue, there are many inquiries to make.

First, is the company legally incorporated, and, if so, has it made its annual reports and complied with other statutes of the state of its organization, compliance with which is necessary to maintain its corporate existence. As there are forty odd states, it is necessary either to have or to have access to the local law books of the same number of states in order to determine what statutes must be complied with.

Recently a father and several sons, who had successfully conducted a small lumbering operation, decided to purchase more timber and extend their business. Preparatory to a bond issue they proceeded to incorporate. Investigation at the instance of the bond house first disclosed that the articles of incorporation were invalid, and, next, the cause thereof. Those good people had applied to their friend, the neighborhood justice of the peace, for their incorporation papers. Not conceiving that anything was beyond either his ability or his jurisdiction, the justice had essayed both to prepare the papers and to perform all official functions with reference thereto.

Leaving the bond issue out of consideration, one cannot be quite sure but that, in that particular case, the lumberman would have gotten along just as well with the justice's charter as with that of the secretary of state.

The next inquiry made is whether, under its articles of incorporation, the corporation has authority to acquire or hold timber lands, and, if so, whether this right is limited to the state of its incorporation or extends beyond its borders; and as some states prohibit corporations from owning or acquiring property of more than a stipulated maximum in value on pain of escheat, the question as to the value of its holdings is immediately presented, if it is either incorporated in, or if the proposed security is in, any of the states that have such statutes.

The next inquiry is as to the extent to which the corporation may become indebted, and what its debts will amount to should the proposed bonds be issued, as many states place limits of indebtedness upon corporations. Should the timber lands be in a^{or} state other than that of its corporation, then all similar laws in that state must be examined, and, in addition, it must be learned what requirements are made of foreign corporations desiring to hold property or to transact business in this second state, and whether the corporation in question has complied therewith.

Coupled with these inquiries is that as to the purpose for which the bonds are desired to be issued, as, although an individual may issue bonds or notes and do with them as he pleases, a corporation can only issue bonds for the purposes authorized by law; and in many states these purposes are quite limited. For illustration, certain Louisiana corporations can legally issue bonds only for construction, repairs, or the purchase of additional property or franchises. It will be seen, therefore, that a serious question is presented if the corporation should desire to make a bond issue in order to fund its floating debts.

There are analogous provisions in all of the states, but they differ widely, and, of course, it requires an examination of the laws of each state in which it is proposed to do business in order to know what is permitted and what is prohibited by the laws of that state. Every lawyer knows that these things can seldom be determined merely by reading the statutes of the state in question; and it is never safe to rely upon the statutes alone, as in nearly every instance it will be found that the statutes have undergone construction by the supreme court, sometimes with unlooked for results. As an illustration, it will probably surprise the laity to learn that a municipal charter which prohibits the board of aldermen from granting a franchise to run through the streets of the city to any gas company, electric light company, steam heating company, telephone company, street car company, or any other company whatsoever, without the franchise first being submitted to a vote of the people, does not require a franchise to a steam railroad to be so submitted. To some it would also be news to know that a charter authorizing a corporation to build dams and construct roads, to buy and sell real estate, to deal in merchandise, to open and work mines, mills and factories, to grind wheat and to manufacture flour, stoves, kettles, pans, rope and any other article whatsoever, would not confer the right to manufacture lumber or wooden ware.

While theoretically the law is an exact science, yet its construction and application are left to finite minds, and people's minds do not all or always work in the same grooves; hence even though two states should have identical statutes on the same subject, the construction placed upon those statutes by their respective courts of last resort is not necessarily identical (would that it were), and thus the necessity of going to the supreme court reports of every

state involved in any bond issue to determine nearly every question that may arise.

Furthermore, it is oftentimes a matter of doubt as to whether the laws of one state or those of another control, and, if so, to what extent.

Suppose, for instance, that a Wisconsin corporation owning two million dollars of assets in other states, and timber lands in Mississippi, should contract on January 15th with a bond house in Chicago to underwrite one and a half million dollars of bonds secured by a mortgage on the Mississippi lands, the bonds to be issued April 1st, and sold at a discount, as all such bonds are sold.

The question arises as to whether the contract is controlled by the laws of Wisconsin, Illinois or Mississippi.

If a Wisconsin contract, would the Illinois usury laws apply?

If an Illinois contract and legal in that state, would the fact that the corporation might not before March 1st file its annual statement, required by the laws of Wisconsin, invalidate the contract, or would it continue enforceable under the Illinois law?

Owning a total of more than two million dollars of assets within and without the State of Mississippi, would the law of forfeiture and escheat of that state apply to the lands there?

The Mississippi property having been appraised sufficiently high to justify a bond issue of a million and a half dollars, would it be presumed that it was worth more than two million dollars and therefore subject to escheat?

The property being in Mississippi, would there be a presumption that it was not worth more than two million dollars, and therefore only one and a third times the bond issue, thus prohibiting the investment of Michigan savings bank funds?

The questions referred to above should all be settled preliminarily to drawing the bonds and the mortgage to secure their payment, —yet the latter are the objects of all that goes before, and by many are considered the serious part of the work.

The bonds should be drafted first. They would be valid if in the form of ordinary simple promissory notes, but, if so, they would convey no information as to the amount of the issue, the security pledged for their payment, nor any one of a dozen other things which an investor would want to know before purchasing them; and as they are primarily made to sell, the very purpose of

their issue would be impeded if not prevented. As a rule, the bonds will follow a form often used before. They will certainly do so should the draftsman not study the laws of the particular states involved. If a Chicago bond house is underwriting the issue, they must, of course, comply with the Illinois law. Should the maker be a Minnesota corporation, they must not violate the laws of that state, and if their payment is to be secured by a mortgage on lands in Oregon they must accord to Oregon laws, else their collection would be unenforceable there. And they must not violate the uniform negotiable instrument law, else they would be unsalable in many states, and probably not negotiable in any. The laws of the various states do not greatly differ in their requirements in reference to negotiable instruments, so it is not hard to draft the bonds. However, there are some differences that must be heeded, as, for instance, in some states a provision for reasonable attorney's fees for collection in case of default would be unenforceable and possibly, on the ground of uncertainty, make the bond non-negotiable—the statutes or decisions requiring the amount or percentage of attorney's fees to be stated—while in other states a provision for a specific sum or percentage is forbidden and the requirement made that only “reasonable” attorney's fees may be collected; the theory being that anything more or less than “reasonable” compensation would be inequitable either to the maker or the holder of the bonds, and that what would be “reasonable” cannot be determined until it is known what services may be necessary.

As strange as it may seem to many, the question was for a long time debated as to whether the fact that a bond bore a seal rendered it non-negotiable.

These will illustrate the character of inquiries that should be made before the bond is drafted.

All of these questions and many more have actually arisen. Some of them are present in every bonding transaction, and they must all receive careful consideration.

It is easy enough for the lawyer who may be called upon to decide the various questions to keep on what is called the “safe side.” All that this would require of him would be to decide every question in its most unfavorable aspect for the bond issue, in common parlance, to “turn down the titles;” to “turn down the charter,” or to “turn down” anything else that might require close investi-

gation. By so doing he would always be on the "safe side;" but the effect would be that he would himself land on the under side, for either his clients would "turn him down," or else they would themselves be "turned down" by their own clientele; and either one or both soon go out of business.

It is, of course, intended that the timber bonds shall furnish absolute security to their purchasers. Some bond houses boast that they take no chances; yet in every issue there are many material matters of law presented for investigation and decision. It will not do to guess them off. Experience teaches that any matter that is slurred over without serious attention will become a Banquo's ghost. It is much easier and takes less time to prevent trouble than to get out of trouble after getting in, and to get into trouble on a bond issue would be a serious thing, especially, if it should be trouble that could have been avoided by proper care in the first instance.

After the bond goes to the engraver (lithographed bonds are more common, but with the increased importance of the business steel engraved bonds are coming into use), and while he is making it look like money, the lawyer will turn his attention to drafting the mortgage or deed of trust to secure the payment of the entire issue.

Such mortgages or deeds of trust take a multiplicity of forms according to the respective desires of the maker and the purchaser of the bonds, the ingenuity of both and of counsel as well, and the necessities or purposes of putting out the issue.

The only object to be accomplished is to afford proper security for the payment of the bonds and interest coupons upon their maturity. This should be done so as to give satisfactory assurance to the bondholders and, at the same time, so as to restrict as little as possible the operations of the maker of the bonds, as in most cases timber bonds are issued by companies actively engaged in the manufacture of lumber.

Some features are common to all such deeds of trust. They describe the bonds; convey certain property to trustees as security for the payment thereof; contain covenants to pay the bonds and interest coupons at maturity, and authorize foreclosure in case of default. These are all of the real purposes of the mortgage, but involved with those things are others that sometimes make scores of pages of reading matter.

The selection of the trustee or trustees brings up a serious

question. Individuals formerly served in that capacity. It was soon realized that natural persons die, sometimes quite inopportunately, and that they do other things that might make it awkward for them to be depended on to act whenever action might be necessary or desirable, such as get sick, change their business or their business affiliations, or they might be absent when action by the trustee was urgently needed; hence the use of artificial persons, corporations, generally trust companies, as trustees, became quite general.

While no state can prevent a natural person, a citizen of another state, from doing business in such state, yet any state can impose any condition which it may see fit upon a corporation of another state desiring either to do business or to own property within its borders, and may prescribe the terms upon which such foreign corporations may seek the protection of its courts. Not only so, but nearly every state in the Union has enacted legislation prescribing such conditions. The most common of these provisions are, that the corporation seeking admission shall pay a fee, generally graduated according to its capital stock, and shall make itself subject to suit in such jurisdiction. In some states corporations organized in other jurisdiction must become domesticated, that is, must be chartered under the laws of those states before they are permitted to acquire property or do business therein, or to seek the protection of their laws or of their courts. Occasionally such laws go to the point of absolute confiscation. The penalty of nullifying contracts is quite commonly visited upon corporations of one state that do business in states other than that of their incorporation without complying with these local laws. And when a contract is so nullified the person with whom the corporation has dealt may receive and hold the benefit of the transaction, but the corporation itself cannot recover the consideration.

A case is now in mind where a corporation loaned money on a mortgage on land in a state where it had not qualified to do business. There was a question involved as to the state in which the transaction really occurred. The decision was that the corporation attempted to do business in the state where the land lay without complying with the laws of that state, hence its contract was held to be void and unenforceable and it lost the full amount of money which it had loaned.

A more recent case was equally as disastrous. A corporation of one state had sold and delivered a large quantity of merchandise in another state in such a manner that it could not be called interstate commerce. The only defense to a suit on the debt was that the seller had not complied with the local laws prior to selling the merchandise. This defense prevailed and the seller lost its goods.

In another jurisdiction, the legislature has enacted that no corporation of another state can do business, acquire property, or bring suit in that state without qualifying as a local corporation, and under this statute a corporation was not permitted to maintain an action to recover property which it had bought and paid for, but which another person had taken possession of.

Some states levy large fines, such as one hundred dollars a day, against foreign corporations which attempt to do business without qualifying under their local laws.

It is manifest that the compensation of a trustee under a bond issue would not justify a trust company either in paying the fees necessary to qualify it to do business in those several states or in subjecting itself to suit therein, and but few, if any, corporations could be found who would do either.

This presented the question as to what were the trustee's duties and could they be performed without bringing the trustees within the provisions of such statutes as mentioned above.

The trustee's duties are inaugurated by acceptance of the trust and the vestiture of title. The trust can be accepted, and always is, at the domicile of the trustee. It may therefore be concluded that this would not be doing business in another state. But the question remains as to the acquisition of property. This can only be accomplished in the state where the property lies. Many of the states have statutes providing that title shall not pass by either a mortgage or a deed of trust (in legal literature they are different instruments), and in those states no difficulty is encountered in the inception of the trust. In other states the common law prevails to the effect that a mortgage or deed of trust does convey title; but the United States Supreme Court, and the courts of last resort in many of the states, have decided that what are known as disqualifying statutes do not prevent the technical vestiture of title in a foreign corporation, and that, even so, only the state itself could question such vestiture, and then only by appro-

priate proceedings instituted for the purpose. In addition, general equity jurisprudence is administered by some tribunal in every state of the Union, and equity will not permit a trust to fail for want of a trustee. So, in so far as merely taking title is concerned, it is safe to use a corporation as a trustee. And the bondholders, in so far as these disqualifying statutes are concerned, would have a perfectly valid mortgage and a legal trustee until a default might arise and the interposition of the trustee, in some manner hereinafter shown, should be necessary, at which time the corporation would not be qualified to act, although the need of its services would be then more imperative than at any other time. In other words, trust companies can be only fair weather trustees except in the state of their incorporation. After a few years' experience with trust companies as sole trustees, it was deemed best to use two trustees in timber bond issues, one a trust company, which should be empowered to act as sole trustee unless action should be necessary which it had not qualified itself to take under the laws of the state in which the land lay, and the other a natural person, to be empowered by the deed of trust to act in case the corporation should not be qualified to act. This plan is now generally followed. The day will doubtless come when some defaulting borrower will attempt to take advantage of what he may consider a technicality in his favor and contest the validity of such provision for two trustees, but the idea has been well thought out and the attorneys for the bond houses do not fear the results.

There has been some confusion as to just how far the duties of the trustee go. The trust companies themselves differ widely with reference thereto. Some of them construe their duties to begin and end with certifying the bonds and collecting their fees therefor. Others assume that it is incumbent upon them to cruise the timber, make a preliminary audit of the books of the borrower, and to lend much assistance in the investigation of titles and the preparation of the bonds and mortgage.

One extreme is about as wrong and unreasonable as the other. The real duties of the trustee, aside from its moral obligations, are those specifically imposed by the mortgage, and none other.

As a matter of policy, well regulated trust companies will not consciously accept a trusteeship except for a reputable mortgagor, nor if it has cause to believe that there is anything wrong or detri-

mentally irregular with the issue. Neither would it desire to accept a trusteeship where there was a presumption of an early default being made.

But such things can all be easily guarded by the trust company doing business with only reputable bond houses. All such houses make exhaustive examinations to determine these very questions, and are much more interested in the result thereof than the trust company can ever be. If the trust company cannot unquestioningly accept the conclusion of the bond buyers on those preliminary matters that might affect its reputation, then it should decline all dealings with those bond buyers.

It is customary for the mortgage to contain a clause by which the trustee expresses its acceptance of the trust and agrees to perform the duties incumbent upon it thereunder. The trustee, therefore, examines the mortgage in advance of its execution, to see if any duties or obligations have been imposed upon it which it is not willing to engage to perform. At the same time, it is careful to see that most ample provision is made negating liability on its part except for money which may actually come into its hands or for bad faith in the performance of its duties. These points settled to its satisfaction, the trustee executes the instrument as an evidence of its acceptance of the trust, and after execution by the maker of the bonds the mortgage is put to record. Here occurs the vestiture of title, except in those states which have enacted otherwise, and here is where the disqualifying statutes heretofore referred to have been of concern.

So many mortgages provide that the bonds issued thereunder shall not be valid until certified by the trustee that it is common to consider the making of such certificates as inseparable from the duties of the trustee. This is erroneous. These certifications could just as well be made by some third person, and in view of the penalizing laws of the different states it would be well to distinguish between the duties of trustee proper and those of a mere certifying officer, or of other duties that may be, and ordinarily are, imposed upon the trustee. The mortgage itself should so differentiate, for fear that the confusion might some time lead to the inference that the certification would be illegal and the bond therefore not validly issued should the trustee be adjudicated unqualified to perform other duties incumbent upon it under the mortgage.

In order to prevent the risk of their loss, it is common to provide that timber bonds may be registered, as registration takes away their negotiability. It is as equally common to provide that the trustee shall be the registrar. Then, again, the bonds are ordinarily made payable at the banking house of the trustee, thus imposing upon it the duties of banker in addition to those of registrar and certifying officer and trustee proper.

Ordinarily, therefore, the trustee acts in four separate and distinct capacities: First, as certifying officer; second, as registrar; third, as banker, and fourth, as trustee. There is no reason, save that of convenience, why these duties should not be performed by separate persons or separate corporations. None of them except the last require action which could be construed as violative of the disqualifying acts of the various states with reference to non-resident corporations; and it would be better should the mortgage make sharp distinction between the various capacities in which the trust company is to act.

Generally speaking, the duties of a trustee, aside from the other duties above referred to, are: to adjust fire losses and collect the insurance; to co-operate with the mortgagor in retiring bonds that may be called prior to maturity; to execute partial releases of timber or other property whenever, under the terms of the deed of trust, the mortgagor may be entitled thereto, and a complete release and cancellation upon compliance with all the covenants contained in the deed of trust. All of these duties may be performed without "doing business" other than in the state of its incorporation. In the event of default, however, the duties of the trustee are quite active, may be quite varied, and must be performed wherever the property covered by the mortgage is situated, and also wherever the business of the mortgagor may lead. Under certain conditions, the trustee may be required to conduct the logging operations or to run the sawmill and other business of the mortgagor. Oftentimes he may even take charge of all the property embraced in the mortgage, including logging and manufacturing machinery and equipment, and conduct the business operations of the mortgagor to the same extent and as freely as the mortgagor himself might have done prior to the default.

As a rule, however, instead of itself entering and operating, the trustee will, upon default, seek the aid of the courts and ask that a

receiver be appointed to conserve the property and conduct the operations until foreclosure can be had. In such case its services, outside the state of its own location, would be largely those of any other litigant. As the trustee is the direct representative of the interests of the bondholders, and at least theoretically the only representative of such interests, it will be seen that even as litigant it can easily find many things to do towards safeguarding those interests.

Aside from the work and worry of conducting the litigation, the trustee will doubtless busy itself to the end of organizing bondholders' committees and assisting in the services thereof. In fact, it should actively contribute to any efforts that may be made to seeing that the bondholders do not suffer loss, and that there shall be no unnecessary sacrifice of the mortgagor's property.

The covenants to be included in a trust deed are of prime importance. Among those that are common and others that are not unusual are: For further conveyance in case it may be desired; to pay taxes before delinquency; to pay any judgment that might become a lien on the land or that might be put into an execution against the mortgagor; to keep fire insurance on the mill plant and other property usually insured by other persons engaged in like business; to keep in repair any machinery and equipment that may be covered by the mortgage; not to cut the timber covered thereby unless it be done in accordance with certain provisions that may be prescribed in the instrument; not to commit nor permit waste of any of the mortgaged property, and, what is imperative, to pay the bonds and interest coupons promptly at maturity.

The maker of the mortgage often assumes other obligations, and among them it is not unusual for the maker to covenant to diligently protect the property; to establish a system of fire patrol or other protection for the forests; to keep proper books of account, open to the inspection of the trustees or of the house that may buy the bonds, in order that its financial condition at all times may be known; to make provision for maturing obligations a few days in advance of their maturity; not to extend the maturities of either bonds or interest coupons except upon such conditions as may be prescribed in the mortgage. The mortgagor should be further obligated, in case of default, to consent to a receivership; to waive laws making for delay, and to pay attorneys' fees in the foreclosure

proceedings, should such be had. Occasionally an operating company contracts that it will keep a specified minimum of "working capital." This latter provision is quite salutary under *some* circumstances, but it can easily be converted into an unnecessary annoyance.

The above are only items in the covenants—agreements, obligations, contracts of the mortgage. Each of them must be appropriately expressed in apt words to convey just the meaning intended, and to avoid infraction of the laws of the state of the mortgagor's incorporation, as well as of the state in which the contract may be made and that in which the property may be situated.

The next consideration is probably to provide a method by which the mortgagor may cut and remove timber, in order that his operations may not be unnecessarily impeded by the bond issue. If the maker is operating a sawmill, provision must be made by which he can use the timber as his necessities may demand. This is usually arranged either by periodical payments of an agreed amount per thousand feet on the lumber as it may be manufactured or sold, or by the payment of a stipulated sum per thousand feet for the stumpage before it is cut, to be ascertained according to estimates agreed upon when the mortgage is made. As a rule, the latter plan is more acceptable both to the bond house and to the maker of the mortgage. To the bond house, because it gives assurance that no timber shall be cut without the bondholders are first paid the value thereof. To the maker of the mortgage, because timber will "run over" in the manufacture, that is, more feet of lumber can be manufactured from a tree than the same tree will be estimated at in the woods, and thus the maker's enforced payments are not so large as if they were made on his actual production. Again, if payments should be made as the lumber may be manufactured, the question of grading and classifying the product must be taken into consideration, as well as many other things that may multiply the work of accounting. Both makers of mortgages and bond houses like to avoid the necessity for much bookkeeping, frequent reports, and the laborious verification thereof which would be necessitated by provisions for payment upon the basis of the manufactured product.

These and other things that may assure safety of the bonds and not embarrass the operations of the maker of them have to be worked out by a practical lumberman, and then put in enforceable form by the person drafting the mortgage.

Owing to the difference in the laws of the various states, it cannot always be safely assumed that what would be legal in one state would be enforceable in another, so many mortgages are drawn with saving clauses to the effect that the invalidity of any one or more provisions thereof shall not affect the validity of the remainder of the instrument.

On the whole, therefore, those documents attempt to take care of all contingencies that are likely to arise, many that may arise, and some that could not arise save in the imagination of a timid investor, and then, like this paper, conclude with the litany praying excuse "for the things that have been left undone that ought to have been done, as well as for those things that have been done that ought not to have been done."

TIMBER BONDS AS INVESTMENTS

BY CALVIN FENTRESS,
Of Lyon, Gary & Company, Chicago.

The careful investor considers three things in choosing his investments: Security, income and marketability; usually in the order named. If, then, these are the features which interest him most, we should consider timber bonds from these points of view and in the above sequence, so that we may arrive at a fair conclusion as to their merits and right to be looked on as really high class securities.

In considering the first requisite, security, we must look into the value of the property mortgaged above the total loan, that is, its reasonably quick value; whether it is destructible and what the depreciation of the property is through lapse of time.

As to the loan value, the average investor, unless he be a lumberman, must, like most investors in all kinds of securities, depend largely upon his banking house for protection and assurance that the loan is a conservative percentage only of the real value of the property. Therefore, it is advisable to purchase such securities from a house of known conservatism and one that knows timber and its value through experience, for there are fairly good timber bonds and excellent timber bonds, just as there are fairly good railroad bonds and excellent railroad bonds, good commercial paper and excellent commercial paper.

Generally the percentage loaned on timber to its real value is remarkably small as compared with other loans. It is not infrequent for a loan to be secured by property having a value of three to four times the amount of the loan. It is seldom that a careful banker loans more than one-half of the value. In probably no other well known class of bonds is this true.

As to destructibility of the security back of the bonds, it is this feature and the public's partial misunderstandings in regard to it that most hurts timber bonds and has hindered them from occupying the position they deserve as high class securities. The general impression used to be that all timber was subject to devastating

fires and, therefore, it could not be considered except as highly speculative. This was largely brought about by the scare-heads we sometimes see in the papers, relative to forest fires. When one considers that many of the great fortunes of America are invested in timber by people who are not accustomed to take large risks, the conviction is brought home that the danger to timber from fire is outrageously exaggerated. As a matter of fact, timber is never destroyed by fire, and by destroyed we mean actually burned up. Indeed, a large part of the timber of America is absolutely immune from fire. Cypress, the wonderful southern wood growing in swamps and wet places with no low limbs, has never, so far as the writer knows, been attacked by fire. Yellow pine, growing over a large part of the South, fears no fires. The grasses growing beneath the pines usually burn every winter without damage to the trees. Fires are not known in the low hardwood country nor in the redwood belt in the West, and so one might go through the whole list of woods naming those which are free from the fire risk; but to reach our point let us consider some that have been subject to forest fires and see what these fires actually do.

From time to time we read that a forest fire has devastated the northern hardwoods of Michigan and Wisconsin or the fir and the pine of the great western country. When such a fire runs through these forests, trees are not burned down, but what occurs is that the grasses and undergrowth and fallen dead logs and dead trees are actually burned up. This intense heat shrivels the leaves of the surrounding trees and, since they are its lungs, it really kills the trees. Most of us know how nearly impossible it is to burn a green log in our fire places. Just so it is equally difficult, nay, even impossible, to burn down a green living tree; but these fires actually kill the trees without question and what results is simply this: disintegration slowly takes place, beginning the next summer. The sap wood of the tree, which, of course, contains the great mass of the tree's moisture, begins to discolor and becomes largely useless for good lumber; then, as time goes on, slowly the heart becomes damaged. This process covers a considerable period and where transportation is available it is usually possible to save practically the entire product. In the West disintegration is particularly slow, principally because of the large size of the trees and the much greater proportion of the heart wood to the sap wood. In addition, insects which hasten the

process of decay are not so common as they are in the middle, northern and southern states, so that the fire danger should not be given too great weight unless the timber securing the loan is remote from transportation and in a rough country where the creation of transportation facilities is extremely expensive, difficult and slow.

Lastly, under the head of security we should consider the natural depreciation of the security and it is here that timber loans have so great an advantage. The security back of the great mass of bonds is property of one form or another, created by the hands of men; behind the railroad bond is the right-of-way, the rail, the ties, the bridges, the culverts, etc., all subject to constant wear and tear, and necessarily replaced from time to time, and so we see good railroad bonds decline when the maker of the bonds is hard pressed for ready money and the maintenance fund is cut down and curtailed. The same is true of the electric railway bonds. Bonds issued by gas, electric light and telephone companies are secured, in addition to their franchises, by the plants, the buildings, the poles or conduits, the wires or pipes, all subject to constant depreciation; varying only with the class of construction that has been put in originally. The equipment obligations of the transportation companies are secured by movable property, absolutely necessary for the company's operations, but, nevertheless, subject to very heavy depreciation. Again, we have bonds secured by lots in our great cities, improved with large buildings or sometimes on the buildings alone. While the depreciation in this class is small, still it is always present in the case of the buildings, not alone from the natural cause of wear, but again because buildings rapidly become obsolete and out of date and as such cannot be rented. And so one might go through the great mass of properties back of most of the bond issues which are generally recognized as sound.

But what of the timber bond? It is secured by land upon which grows, without cultivation and without the help of man, timber. The amount in this country is pretty definitely known and there is both a steady and enormous demand for it at home and abroad. This limited supply, decreased year by year through the consumptive requirements, is, therefore, a natural monopoly. Its future value must depend upon the cost of substitutes and the cost of reproduction. We are to-day in the age of steel and concrete, two substitutes of large potentiality, yet the production and consumption of timber

products is at present on as large a scale as it has ever been. The cost of reproduction has been closely estimated and it is so far in excess of present values as to make it impossible of our consideration. We, therefore, have a product, limited in extent, and for which there is an increasing demand. Its value is now low and it must rise, judged by every economic law we know. This is so generally recognized that it is often remarked about a mediocre timber bond issue that it will come out all right through the enhancement in values.

While lumbering plants are usually included in timber bond mortgages, where the loan is to an operating concern, little value is given to the plants in considering the loan, and in practically all cases the plant is a very small part of the security offered. Beneath all the timber is the land, possibly of small value when the loan is made and probably not considered at all by the banking house in making the loan, and yet it is a basic security. There have been many lumber companies that have sold their land after the timber was removed for more than both the land and timber cost them in the first place; and so we have in the timber bond a security which, under economic laws, must increase in value and which has, during the history of the lumber business in America, steadily risen. Many are the lumber concerns which have been badly managed and which would have regularly lost money in their manufacturing operations if in their accounting they had considered the actual value of the raw product they were using. But the owners of these concerns, through the rise in value of their timber, have made fortunes and been known as successful manufacturers.

Next in the order of importance is considered the income. Most timber bonds bear six per cent interest, payable semi-annually, and often when issues are first brought out the investor can secure a small additional discount of a quarter to a half point, especially if he is a large buyer. Compared to this income is the four per cent to five per cent of the railroad bond or the five per cent to five and a half per cent for the average public service or industrial bond, an advantage of from one-half of one per cent to two per cent in favor of the timber bond. As previously indicated, there are timber bonds secured by timber together with mills, railroad and equipment necessary for the manufacture of lumber, and there are also timber bonds secured by timber alone without a manufacturing plant. In the first case the plant is calculated to have sufficient capacity to amply take care

of all interest charges. In the second case the bonds are usually guaranteed by individuals or corporations having sufficient outside income to easily care for the principal and interest installments as they fall due. In either case if the security back of the bonds is ample and the loan is far below the actual quick selling value of the timber the investor is fully protected.

Last, and yet of great importance, is the question of convertibility or marketability. Can the timber bond be readily sold in time of need? It is seldom, if ever, listed on the public exchanges. There is no daily printed market of the bid and asked. Generally it might be termed an inactive security. It is these very reasons which enable the first class timber bond house to make for their issues a good steady market. For timber bonds are bought for investment and the interest return and being held by investors and producing so satisfactory an income they are seldom sold again, even in times of stress. Not being listed, the holder is not continually annoyed by printed declines, or lower prices, brought about by sympathy with a falling market. In consequence, the first class timber bond, once well sold, is seldom thrown on the market. These conditions enable the banking house who brought the issue out to properly protect and steady the market for their securities. In addition, such houses know that a ready market for their bonds is most desirable and the best method of advertising. There is, too, the moral relation between the banking house and its client, which is always lost when one is dealing in listed securities through brokers who have had nothing to do with the underwriting or marketing of a particular issue of bonds. A banking house of high standing, therefore, seldom permits its issues to be offered at much below the original public issue price, and generally even in times of storm such banking houses are ready to purchase back bonds it has brought out, usually at one or at most two points under par. The possible loss under such conditions should be figured from an income basis, for if the investor has held his bond for any reasonable length of time he has secured a very fair interest return. On the other hand, in ordinary times the excellent issues handled by the best houses usually have a market at par or oftentimes at decided premiums.

After all, if timber bonds are in reality so secure, such high income bearing investments and are readily convertible, why do they sell on a six per cent basis, when other recognized high class bonds net

so much less? The answer is that the investing public has not been fully educated to the merits of timber bonds. They are now being educated, and slowly, but surely, the discriminating public is coming to realize the intrinsic merit of timber bonds. The demand for them is growing larger, particularly for the really excellent issues, and so intense is the competition between banking houses to secure these high class bonds that the combined pressure of limited supply and increasing demand can only result in one thing, the end of the first class six per cent timber bond. With money market conditions such as are now prevailing there can be but one result, timber bonds on a lower interest basis. The writer feels that such a time is very near and that it only remains for a banking house of unquestioned standing to take the first step. Indeed, there are six per cent issues outstanding to-day that are actually selling on a five per cent basis, and it is firmly believed that such excellent issues will soon be brought out and offered to the public to net considerably less than six per cent. The best buyers of timber bonds now are lumbermen who have become investors, and surely no higher recommendation could be found.

THE ACCOUNTANT'S RELATION TO TIMBER BOND ISSUES

By ARTHUR F. JONES, C.P.A., A.C.A.,

With Marwick, Mitchell, Peat & Co., Chartered Accountants

The position of an expert accountant in connection with timber bond issues differs radically from that of the cruiser, appraiser and attorney, inasmuch as his duties are, or should be, continuous; not only is he responsible for the accuracy of the balance sheet on which the bond issue is based, but he is a continuous protection to the bondholders.

All properly drawn trust deeds now provide for the appointment of auditors and for the submission periodically of audited statements to the trustees; the auditor therefore becomes the "watchdog"—it is his duty to report if the security is not at all times adequate and intact, in accordance with the terms of the mortgage and the provisions of the sinking fund.

It is doubtful whether sufficient importance is attached to that portion of the prospectus which deals with the expert accountant's report, or whether the general public realizes, when such report is omitted, the seriousness and significance of such omission. The expert accountant in these days is not merely an individual with an aptitude for figures. In addition to his knowledge of accounting principles, he must have sound business judgment and must bring to bear on his subject an expert knowledge of the particular business upon which he is reporting. Mere figures and statistics without that expert knowledge would be of little value.

On the above mentioned lines the duties of an auditor may, therefore, be considered under the following headings:

1. The security behind the bond issue.
2. The protection of the security for the bonds and the proper fulfillment of the trust deed.

The Security Behind the Bond Issue

The prospective investor is naturally primarily interested in the sufficiency of the assets securing the bond issue; he must be satisfied

that not only does the security offered afford adequate protection to his capital, but that the earning capacity is sufficient to provide for interest on the issue at all times. Most prospectuses contain reports from cruisers as to the value and extent of the holdings, from appraisers as to the value and condition of the plant and machinery and from expert accountants as to the general financial condition and earning capacity of the company in question. It must be borne in mind that the expert accountant's report is not compiled altogether separately and individually. It is not merely a collection of figures, for he must work hand in glove with his fellow experts and the final result should show the position of the company as determined by the combined experience and knowledge of all the experts engaged.

Consideration of the accountant's relation to particular items in the prospectus may be more intelligently set forth by a study of the details and figures submitted by the bond house or bank promoting the issue. The form varies in particular cases, but the following may be taken as a fair example of the facts and figures usually given in the case of the larger issues of bonds when the company is a "going concern."

X Y Z LUMBER COMPANY
FINANCIAL STATEMENT

ASSETS.

Capital Assets:

| | |
|---|-----------------------|
| Timber lands and contracts, 848,590,848 feet at \$2.50 per 1,000 feet..... | \$2,121,477.12 |
| Buildings, machinery and equipment, logging railroads and equipment, town site, mill site, etc..... | 1,100,000.00 |
| | <u>\$3,221,477.12</u> |

Current Assets:

| | |
|---|------------------------------|
| Cash in bank and on hand..... | \$8,257.60 |
| Accounts receivable (less reserve for estimated freight and for doubtful accounts)..... | 162,400.25 |
| Inventories..... | 587,221.10 |
| | <u>757,878.95</u> |
| Insurance paid in advance..... | 826.80 |
| | <u><u>\$3,980,182.87</u></u> |

LIABILITIES.

Current Liabilities:

| | |
|-----------------------|--------------|
| Notes payable..... | \$826,206.19 |
| Accounts payable..... | 47,620.18 |

\$873,826.37

| | |
|--------------------------------|--------------|
| Capital stock and surplus..... | 3,111,356.53 |
|--------------------------------|--------------|

\$3,985,182.90

The first item for consideration is the timber holdings. It may be claimed that the auditor is not responsible for the accuracy of the cruise. No more is he; save when the cruise is carried out under his supervision, and it may be said that the firm with which the writer is associated has attached to its staff cruisers and other timber experts so as to enable it to substantially guarantee the reliability of any prospectus to which its name is attached. Assuming, however, that the timber has been cruised and valued separately, the bondholder may imagine that the report of this cruise is amply sufficient for his purpose. This is by no means the case. It is the auditor's duty to ascertain that the titles to the land or the licenses are actually in the name of the company and that they have been properly acquired and registered. He should also satisfy himself that the cruise is a reasonable one. This he can do if he is connected with an office that makes a specialty of the timber business, as there will no doubt be on file details of other cruises from the same district. He should thus be able to tell approximately what a given acreage should produce in the way of standing timber in a particular locality. Cases have been known where the cruise has shown standing timber which could not possibly have been crowded into the acreage owned by the company, and instances are not infrequent where timber not actually owned by the concern in question has been cruised and reported as part of the security.

It is cases like these that bring out the value of an accountant's services in connection with bond issues. The bond houses dealing in timber securities naturally try to safeguard their interests and the interests of the bondholders, but without an examination by reputable expert accountants it is almost impossible to afford adequate protection.

In some cases a specific value is attached to the land itself and an

estimate given of its probable worth after it has been cut over. All that can be said of these figures is that they are estimates pure and simple—the value of “cut over” lands is wholly problematical and is dependent on geographical and other conditions. If such a valuation is included the accountant must see that the lands are of course actually owned and that the estimate of their value is in his opinion a reasonable one. Conservative bond houses, however, it may be said, do not include the value of lands not cut over as part of the value of the security; the timber itself is usually the security for the issue and provides the sinking fund for the redemption of the bonds.

The next item with which the expert accountant must concern himself is the value placed on the plant, machinery and other equipment of the company. This has in all probability been separately appraised, but even in such a case he must be satisfied as to the reasonableness of the appraisal. Does it represent the actual value to the bondholder, is a vital question. The accountant must satisfy himself that this is the case; that the figures given represent an actual value and not a “reproduction” estimate, which has not necessarily any relation to actual value. The accountant has before him the details of the actual cost of construction, and, after providing for adequate depreciation based on the probable length of the “cut,” can ascertain whether the appraised value is approximately the actual one. The value of the plant and equipment of a lumber manufacturing concern is almost entirely dependent on the amount of timber available for its use and not upon its actual cost or “reproduction” value. Once the timber resources of the locality become exhausted, the plant and machinery are worth only their salvage value.

The current assets are not as a rule covered by the mortgage, but as the success of the business is dependent on the amount of floating as well as fixed capital, the accountant over whose name a financial statement is issued will naturally verify them, paying particular attention to the state of the accounts receivable, and the method of taking and pricing the inventory. He should ascertain by the production of the actual policies that the insurable property is adequately covered against loss by fire. He will also take steps to see that all known liabilities are included.

In addition to reporting on the assets, the accountant should investigate the earnings of the company and state what they have been for the past few years, after allowing for all ascertainable losses

and depreciation. Even though a company has assets valuable in themselves, they are poor security for an issue of bonds unless they can be profitably brought to market. Although past operations are not always a true index to future earnings, especially should a change of management have taken place, or a large extension of business be made possible through the introduction of new capital, the intending investor is entitled to full information in respect to them, so that he may form his own opinion as to their application to the future business of the company.

The investing public would do well to inquire very carefully into any proposition not reported on by expert accountants and should take steps to discover why such a very natural precaution has been omitted.

Protection of the Security for the Bonds and the Proper Fulfillment of the Trust Deed

The accountant's duties in connection with an issue of bonds should not cease when the bonds are subscribed for; his value to the bondholder is practically only commencing, for an auditor should be appointed to safeguard the interests of the bondholders during the life of the bonds. It is usually the only means whereby an investor can obtain an independent report as regards the condition of his capital invested in the company. Periodical and audited statements submitted to the trustees disclose the true position of the company, and enable them to act as the situation requires.

The provisions of trust deeds regarding statements of earnings and matters of a like character, are at times very inadequate, in some instances the company being only required to report the mill "run" monthly. Beyond disclosing the amount of timber used, such information is valueless from an accounting or economic standpoint. However, reputable bond houses usually provide for the insertion of an "audit" clause in all trust deeds, and the investing public should insist on this provision for its own protection.

An adequate audit naturally benefits the stockholder as well as the bondholder, but it is more particularly with the interests of the latter that this article is concerned. Assuming then that the trust deed provides for an annual or semi-annual audit, what protection does the bondholder derive from such an examination?

Firstly, he is informed whether his security, after the sinking

fund has been adequately and properly provided for, is intact. The accountant ascertains from the books information as to whether any part of the property has been sold or otherwise disposed of, and if any portion has been realized, whether the proceeds have been properly turned over to the trustees in the interest of the bondholders. He satisfies himself that the plant has been properly maintained and that the necessary provision for depreciation has been made. He carefully examines and criticises in detail all additions to and appreciations of capital assets, and verifies that all amounts charged to lands and timber, machinery and equipment and other assets of a like nature, are reasonably and properly chargeable to such accounts. An auditor's position is a responsible one and he takes nothing for granted.

Probably the next matter in which the bondholder is vitally interested is that of the sinking fund and its requirements. In order that the accountant may have a clear understanding of the whole situation it is necessary for him to carefully peruse and have a thorough grasp of the provisions of the trust deed and all its requirements; more particularly must he be familiar with those portions relating to the sinking fund. Sinking funds are as a rule provided for on the basis of logs cut (log scale) which is the more common, or on the mill run (lumber scale). Each method has features which recommend it, but that based on the scale of the logs cut is probably the most equitable to all concerned. Whatever be the basis, it is the auditor's duty to see that the provisions have been duly carried out and the necessary amounts deposited with the trustees at the stated periods. The accuracy of the company's own monthly reports to the trustees should be verified from the logging and other records. A very substantial check may also be had on the amount of logs actually handled by the saw mill by means of the board measure produced, the percentage of "overrun" or "underrun" varying with the particular scale used and also with the dimensions of the logs handled.

The auditor having been satisfied in these most important particulars, the bondholder is then assured that either his security is intact or that he has received its proper equivalent in actual cash. The accountant's duties and responsibilities do not end there, however; he should also be instructed to investigate the profit and loss account of the company, and report to the trustees as to whether

it is earning the amount of its interest or not. In the latter case, or should the auditor report any unfavorable condition of the assets, it is for the trustees to take such action as they consider that the situation warrants, and the trust deed permits.

In connection with statements regarding earnings, there are several features which are probably unknown to persons not actually engaged in the lumber industry, with which the accountant must be familiar. He must carefully examine the logging and mill records and ascertain that all items which enter into the cost of manufacture have been properly included, for the estimated cost of manufacture is often a prominent part of the prospectus, and the trustees are naturally interested in knowing how closely the actual results coincide with the estimated results. Very carefully must the auditor watch the item of "estimated freight," a constant source of error, and must see that the proper amount is deducted from the sales in respect thereof.

Depreciation on the whole of the company's operating properties must be provided for on a correct basis. It is often left to the auditor to fix the rate of depreciation, but where this is not the case he must be satisfied that the amount set aside is fair and reasonable.

The list of stock on hand should be carefully examined and the book inventory compared with the physical inventory. With regard to the pricing of the lumber inventory, much divergence of opinion exists among lumbermen, and even accountants are by no means agreed as to the best basis of valuation. It is not within the scope of this article to discuss the various methods and their particular advantages. The auditor will usually adopt the method of pricing used by the particular mill, but he should state in his report what basis has been adopted, and in cases where the cost of production has not been used as the basis for pricing the inventory, should give details showing the variation between the inventory price and the actual cost of manufacture.

All of the accounts receivable must be carefully scrutinized and the accountant must be satisfied that the reserve set up is adequate to provide for probable loss in connection with unrealizable amounts.

The auditor must be also satisfied that all the known liabilities of the company, both actual and contingent, have been included.

The value of an expert accountant's services in connection with

the discovery and prevention of fraud are too widely known to be discussed at the present time, and are without the scope of this article, which is intended to show the benefits to be derived from examinations made by expert accountants in connection with timber bonds and in relation to audits carried out after the bond issue is completed. The majority of promotions are honest, but neither the trustees for the bondholders, nor the bondholders themselves should be content to rely upon the unsupported statements of the officials of the company. Generally speaking, the statements are honestly made and without fraudulent intent, but the officials, having to rely largely on the work of their subordinates, at times render statements which are misleading if not wholly inaccurate.

The appointment of auditors under deeds of trust is becoming more and more general, as the investing public and the bond houses realize that examinations are necessary to protect the interests of the bondholders, not only at the commencement^{*} of the issue, but during the life of the bonds.

TIMBER BONDS AS LEGAL INVESTMENTS FOR MICHIGAN SAVINGS BANKS

By W. A. HAMLIN & Co.,
Detroit, Mich.

The laws of Michigan governing the investment of savings bank deposits provide that they may be loaned "upon notes or bonds secured by mortgage lien upon unencumbered real estate worth at least double the amount loaned." It is under this section that timber bonds have found favor with these institutions.

The timber bond is secured by real estate containing standing timber worth at least double the amount of the loan. It bears six per cent interest, matures serially, generally sells at par, and is based upon a commodity with a steadily increasing value.

The timber being the principal security underlying the loan, great care is always taken in estimating its quality and quantity by the bond house putting out the issue. It is required that the timber land must be largely owned in fee, or controlled by lease running well beyond the life of the bonds. It must be so located as to present no unusual obstacles to logging, the timber must be of good, merchantable quality and cruised by men of known character and reputation. The cruisers count the trees upon the property and figure out the lumber footage by mathematical calculation, and as this work is done by experts, the results are accurate and reliable.

The titles to the property are examined at the county seats, the state and United States land offices, and the abstracts checked with the original records by attorneys who specialize in such work. If the titles are approved, the mortgage is drawn so as to contain every safeguard that can be given the investor.

A sinking fund provision is inserted, requiring the deposit with the mortgage trustee of a specified amount per thousand feet of timber payable either before or at the time of cutting. This sinking fund will retire all of the bonds when about one-half of the timber has been cut off the land. By the operation of this sinking fund, and the serial retirements, the holders of the bonds maturing last,

have an ever increasing equity, as the original rate at which the loan was made is being constantly reduced. Thus a loan made at the rate of \$1.50 per thousand feet of timber, will have been reduced to about twenty or thirty cents per thousand when the final maturities become due.

From a physical and moral standpoint, the average timber bond is subjected to a most rigid and thorough test, having been passed upon by experts from the inception of the loan. Every contingency that might cause damage and depreciation to the timber is carefully safeguarded in the mortgage by the requirement of a deposit covering the amount of the loss.

If the company is operating the property, its books are audited by experts, and a statement made of its business covering a period of years. The book value of the physical security is carefully determined, and if found adequate for the loan, the moral risk is then analyzed. The character of the men constituting the company, their ability as lumbermen, and their experience in the business extending over a definite time, are all subjected to the most searching inquiry, as is likewise the credit of the company and its promptness in meeting obligations.

The payment of both principal and interest is sometimes personally guaranteed by an individual member of the company, whose financial worth will approximate or exceed the loan. This requirement of guarantee while more or less in general vogue, does not, however, add any additional safety, as there is no way to prevent the endorser from disposing of his property at any time he sees fit.

After all, the timber land under the mortgage is the main reliance of the bondholder, and that being satisfactory, the personal guarantee may be overlooked or required, according to the predilection of the bond house making the loan, or the individual purchasing the bonds.

One of the principal arguments made against timber loans is the fire risk, but a little examination of this supposed danger will prove it more imaginary than real, as practically all the fire losses are confined to certain northern and northwestern portions of the country, which being well known, are avoided by bond houses. No phase of the timber bond is given more careful consideration by bankers and bond houses than the fire risk.

Before a loan based upon timber lands outside of Michigan can

become a legal investment for Michigan savings banks, the state authorities require the appointment of a Michigan institution as trustee, subject to the examination of the state bank examiner. The trustee has in its possession a copy of the mortgage, the legal opinion, the detailed cruise, and all other information bearing on the trusteeship and bond issue.

With all the safeguards placed around timber bonds by the laws of Michigan it would seem they are as safe an investment for savings banks as human ingenuity can create. The wisdom of making timber bonds legal savings bank investments is borne out by the small number of defaults, the percentage being so slight as to be almost negligible.

THE TIMBER CRUISER. HIS RELATION TO TIMBER BONDS

BY THOMAS R. CUMMINS, B.S., C.E.,
With Marwick, Mitchell & Co., New York and Chicago.

Without the services of the timber cruiser—a man of physical hardihood, good mental training, peculiar personal skill and honor—the lumber industry and timber investment business of to-day would be of small proportions. Based upon the reports prepared by the skilled labor and good judgment of the expert estimator, some of the largest outlays of capital known in business have been made. The investors who have millions tied up in timber lands, the banks that have bought large issues of timber bonds, and the operators who are to-day cutting and marketing the world's supply of lumber, all have depended upon the judgment of some timber cruiser.

Timber cruising is one of the most picturesque callings known to the business world. The cruiser, however, that you may have met in some small hotel near the woods you would scarcely class as a representative business man. He probably stalked into the little hotel wearing a rough suit, slouch hat, heavy boots and leggings; from his shoulder hung a pouch of leather containing a compass, a tape line, a note book and if in mountainous country an aneroid barometer; at his belt a small axe swung in a sheath and in rare cases he may carry a rifle or pistol. After he has washed and had a good meal you will probably see him humped over the writing table laboriously computing the notes in his book by the dim light found in such resting places for man. Again, he may, instead of stopping at the little hotel, be enjoying the hospitality of some lonely squatter or homesteader in his little cabin, telling of the outer world and bringing a little cheer to this lonesome outpost of civilization. Or yet, again, you may find him with a little more baggage in the way of a pack sack containing his blankets, bacon, flour, salt, etc., and camping at night beneath some sheltering tree beside a spring or stream. In this latter case he will probably have as a companion a compassman, who will run his lines and help in

packing and cooking. Thus you will see that the cruiser beside knowing timber must be somewhat of a mathematician, a guide, a cook, a pack horse and a surveyor.

When the cruiser has covered the appointed territory, he can, if he has done his work thoroughly and honestly, report with an astonishing degree of accuracy, how many million feet of lumber there is on the tract he has examined. He will tell the different species on the tract and the various sizes of the trees of each species. He will also be able to state the logging conditions and the general character and topography of the country.

There are, of course, many different degrees of thoroughness with which the work may be performed. As regards honesty there are also, unfortunately, more standards than one. There have been too many instances where cruises have been made and the quantity reported as double or even triple the actual amount of timber found, or where outside property has been cruised and the timber on it reported as being upon the lands under consideration. Often in the prospectus of a bond issue there will be seen this statement "I have gone over this property and checked various sections and find that a conservative average is from 25,000 to 30,000 feet per acre." The chances are that the checks were taken in especially heavy growth and that more likely the general average is not over one-half of the figures stated. How is the investor to know that his bonds are properly secured and that the cruise of the timber is correct? He of course relies on the integrity and standing of the underwriter or banking house making the offer of the bonds, but at the same time he should insist that the cruise has been made by a responsible firm and that it has been thorough.

Cruises are often made in a haphazard way as sometimes those employing the cruisers will not pay the price for a thorough examination. Frequently such cruises are mere estimates formed by the cruisers walking or riding through the tracts and guessing at what they contain. Some cruisers will claim that even by such methods they can give a fair estimate of the contents of a forest, but as the basis of a bond issue such an estimate is manifestly unreliable. A more thorough inspection besides bringing out a very accurate estimate of the timber qualities will allow of a careful study to be made of the general conditions affecting the whole project. A report can thus be made that will give an investor an opportunity

of judging of the value of the timber and of the other resources instead of simply giving him a bald statement of the number of feet of timber estimated to be on the property.

In addition to a detailed report as to the quantity of each species divided into several sizes, the cruiser should give the number of poles which may be cut upon the property, the amount of small timber available for posts and ties and also an estimate of the amount of cord and pulp wood that might be got out by utilization of the tops, branches and small trees. If there is much hemlock on the tract he should estimate the cords of bark which could be used for tanning purposes; if the majority of the timber is long or short leaf pine, he should report upon the quantity of small trees or reproductive areas, as the conservation of the pine forests may be carried out at small expense in many localities if the amount of the reproductive areas is known. He should also give full particulars of the topography of the country and prepare accurate maps showing the streams and other essential details for a logging proposition. For each tract he should submit a logging scheme showing the best way to bring the logs down, with notes of rapids, obstructions and other difficulties. A general review of the situation as regards the available mills, or mill sites, or the possibility of erecting new mills, and the markets they would supply will also add to the value of a cruising report. A report on the availability of the land for agricultural purposes after it has been cleared, also a note of any surface indications of minerals, will be of interest.

When it has been determined that certain tracts are to be cruised, the cruisers are notified to meet the supervising engineer on a certain date at the nearest point to the property. In the meantime he has gone to the point, after procuring all maps and survey data possible relating to the tract, and arranged for transportation, outfit and supplies for his men. If the country is thickly settled it is usual to quarter the cruisers at a local hotel or in some farm house, but if there are large areas to be covered and few houses or cabins, a camp outfit is put in use, a good cook engaged and supplies purchased. Local men familiar with the country are engaged as compassmen or to guide the cruisers to the designated property corners in order that no time may be lost.

When the cruisers arrive a start is at once made and certain territory is assigned to each. If the tracts are small and scattered,

each cruiser takes his map and data, his compassman and such supplies as he may need and starts out. Otherwise the camp is moved to the center of the large area or as near as the location of drinking water will permit, and the cruisers work from that point, the camp being moved as often as necessary in order that the men may not be obliged to walk too far to reach the tract they are cruising.

The first duty of the cruiser is to locate one of the corners of the tract he is to cruise. If in one of those regions where the government surveyors have laid off the area into townships and sections, this is comparatively easy, but if in some of the states where other methods govern it may be more or less of a problem. In southeastern Texas, for instance, the old Spanish vara, equal to $33\frac{1}{2}$ inches is the unit of measurement and the land is all held by grants, some of them dating back to the time when Texas was a Mexican colony. After locating the corner, the cruiser looks over the survey data or map and finds the bearing of the lines meeting at this corner. His compassman then starts out along one of these lines, following the direction by compass, after making the proper allowance for the variation of the needle, and paces the distance, using a length of step which will give him two thousand paces per mile. He does not walk along with his eyes fixed upon the compass, but after noting the direction he is to go he picks out some conspicuous tree on that line and with his eyes on that he moves forward in a straight line. When he reaches the tree he has been using as a guide he again refers to his compass and picks out another tree on the line and so continues until he reaches the required point. The compass used may be either a hand instrument called a military compass, or the more cumbersome but also more accurate one, known as a staff compass, which has a staff for placing it erect and a screw for setting off the variation of the needle.

For illustration, we will suppose the tract to be covered is a section of one square mile, or 640 acres. The compassman starts from the southwest corner and runs his line east. If he is working sections 31, 32, 33, 34, 35 or 36 he will probably find the south line fairly well blazed, as this is the south line of one township and the north line of another. He will count his paces by counting the right foot only and keep the count with a tally register. At a short distance to his right the cruiser will walk, scanning the trees, judging their heights, diameters, species, defects, such as *pink*

spots, burns, etc. When the compassman has stepped off seventy-six paces he calls out "check" and stops. The cruiser then proceeds to count all the trees of merchantable size between the starting point and the point where the compassman stands, and to a distance to the compassman's right equal to seventy-six paces. This gives a square area of one acre. The cruiser counts and estimates the quantity of timber of each species and in the various sizes and enters the quantities in his note book. It is wonderful how accurately an experienced cruiser, simply by looking at it, will estimate the number of feet there can be sawed out of a particular tree. He usually, however, carries a rule or a caliper rule and measures the diameter of a number of the trees in order to check his estimating ability. In very valuable timber he will measure every tree and call the figures to his compassman, who keeps the tally. After estimating this sample area he calls "all right" and the compassman then starts forward. When he has completed two hundred and fifty paces from the starting point he calls "tally" and goes on until he has made seventy-six paces more when he again calls "check." When he called "tally" the cruiser again began to count and estimate the trees on this sample acre, noting where the compassman called "tally" so he could gauge his distance correctly.

Between the sample acres the cruiser has been busy noting the condition of the trees which he does not count, as their condition as compared with the sample acre will determine certain modifications he will make in his estimate of the next sample acre, so as to give a true average of the timber as it stands. This is something which cannot be learned from books and which is based entirely on the previous experience of the cruiser. The two men follow this procedure until they have covered two thousand paces, or one mile. A good compassman, on fairly level ground, will find within a step or two of his two thousandth step the post or tree indicating the other corner of the section. At this corner, the southeast, the compassman will turn north and step a distance of two hundred and fifty paces, taking checks as before, and then will turn west and cross the tract again taking checks as before except that the cruiser will follow behind the compassman and in taking his checks will cover thirty-eight paces on either side of the line. At the west line they again turn north two hundred and fifty paces then back across the section. This is kept up until the entire section is covered

and an actual count and estimate has been made of eighty sample acres or one-eighth of the entire tract. This should give a very close estimate of the section and is sufficiently accurate for most purposes. On very small areas, however, where the timber is extremely valuable or where there is a dispute to be settled, the check acres may be taken one hundred and twenty-five paces apart each way, which will give an actual count of one-third of the entire tract.

To assist him in making a map of the area, showing the location of the various species of trees, streams, roads, railroads, clearings, tramway lines, burned areas, windfalls and other features necessary to a proper report, the cruiser has on the right hand side of his note book a rough sketch of the area, and as the compassman crosses these various features he calls out the distance. At the fences, roads and railroads he will make a note of the bearing of the lines and usually pace the distance along small clearings, locate the buildings and insert other data.

When the cruiser and his compassman have returned to camp, cleaned up, and eaten a good meal, they get out the report blanks, scale, protractor, and proceed to add up and verify their checks, draw a map on the report blanks and set down all the data that will go to make up the completed report. They first add up all the checks for each diameter and species of tree, multiply the sum of each series of checks by the number of acres in the area of the tract and then divide by the number of checks they have taken. The result is the amount of each diameter and species on the area.

While the cruiser has been estimating he had also made notes of the average number of 16-foot logs per tree which can be cut from each kind; whether there is any large number burned, blown down, or infested with worms; the method of logging the area to the best advantage. All these features he notes on his report, and it is usually late and dark before he has it in shape.

Perhaps the cruiser before starting his work learns that the government surveys are very poorly done, or that the lines have been run so many years ago that they are hard to discern, or possibly he is in a section of country where the tracts are irregular and the survey lines barely marked. In that case his work is complicated, because his first duty will be to establish the boundary lines of the property in order that he may be able to compute the area and the amount of timber correctly. He locates one of the corners, but in

order to do this he may be obliged to go back one or two miles to a known corner and re-run the lines. Then he runs the outside lines of the property, taking checks all the way around, and blazing the trees on the line at every tally point. Thus he has guiding marks when he commences his checks across the property. It is also possible that the parties for whom the cruising is being done desire the report to show the amount of timber by forties instead of by full sections, in which case the cruiser will make his computations for each forty acres of the section instead of the entire area. Another modification that may be made in the check acres is to take checks every one hundred paces and to count and estimate the trees in a circle whose radius is twenty-six paces. This gives a third of an acre as a check and by taking checks every one hundred paces in each direction on a section of 640 acres an accurate estimate of one hundred and thirty-three acres is obtained. Some cruisers prefer this method as, after the compassman has called "tally" he steps off thirteen paces and halts. The cruiser then using the compassman as a center, walks around him at a distance of thirteen paces and thus is able to see, without any doubts, every tree on the area of one third of an acre.

During the course of a cruise as outlined above, the supervising engineer has been gathering other data of interest, getting supplies to the men and dropping in on the various camps unexpectedly. He may take his horse and head cross-country to where a certain cruiser is working and come on him at work. In this way all of them are keyed up to do their best. He also rides through the tracts and makes notes of the species, burnings, and exact conditions. When the reports come before him, before going to the office for final drafting, he is thus enabled to rectify discrepancies and errors. Another thing that should be, but is not often done, is to take one of the best cruisers and send him out to check the work done by the others. This adds to the accuracy of the work and though it adds to the cost, is worth all the trouble and expense in keeping the men up to the mark.

As the cruising of the different tracts is completed, the reports after having been passed upon by the supervising engineer are forwarded to the office of the firm that has the contract for the work. There the final maps are made, the figures and computations checked, and the complete report prepared.

With a cruise made in this manner, and vouched for by a reputable firm, the investor in timber bonds has all the authoritative information that can be obtained in regard to the amount and quality of timber on the property.

The conditions, of course, are more complicated in a wild country which has not been surveyed and of which there is meager knowledge as to the relative location of streams, mountains or other landmarks. Take, for instance, a cruise of virgin timber in western Canada where not even base lines have been surveyed, and where the timber has been located probably by a man walking up the frozen streams and at a likely point locating a corner. This he did by cutting down a small tree leaving a stump about six feet high, which he squared near the top and placed his description on one face with a pencil or by pinning on a typewritten sheet brought from town. After one or two winters these descriptions in all probability have been washed away except in the rare instances where an indelible pencil has been used, or the locator cut the words with his knife.

The cruiser in such a country must, therefore, to a large extent, depend upon local men who have hunted and trapped in these wilds, or upon the actual locators. He must also use his own good judgment as to many of the features.

Even with all these difficulties it is possible to get a very close estimate of the amount of timber standing upon the property by using care and not taking anything for granted. However, it is not often that such precautions are taken, and it is regrettable that so many bond issues have been floated recently upon western Canada timber, based upon a so-called cruise, but which has been only a cursory examination of the more accessible and best covered tracts. The results stated on such a basis are, of course, far in excess of the actual amounts which will eventually be cut on the tract.

As a continuing element of security in connection with all bonded timber properties it would be advisable to have *periodic* reports made by a cruising firm. This would not necessarily entail a cruise, as the annual report of the amount cut should show the amount still standing on the property, but a general inspection might be made to determine whether the timber is being cut to advantage, whether the mill cut is "overrunning" or "underrunning" the estimate, and whether the timber is being utilized to the best interests of the bond and stockholders.

TIMBER BONDS AS INVESTMENTS FOR INSURANCE COMPANIES

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Selecting suitable investments for the funds of insurance companies is one of the serious problems of to-day. The ever increasing assets which now amount to hundreds of millions of dollars present an undertaking for the officials of these companies which is of the utmost importance. Because of the enormous amount of the assets, investment departments have been created to investigate and purchase conservative loans.

Looking back into the history of some of the oldest companies we find from analyzing their reports (state insurance departments not yet created) that over fifty per cent of the invested assets were in loans on real estate. In 1860, taking as a basis several of the largest companies, the investments in mortgage loans amounted to about sixty per cent of the total assets, while the total amount invested in all classes of corporation bonds amounted to less than one per cent. It must be remembered that securities issued by corporations were scarce at that time and, consequently, mortgages were the only form of investment yielding an income sufficient to attract insurance capital, but it must also be remembered that the amount of capital to be invested was much smaller than at the present time. The companies maintained about this same proportion for the following fifteen years except for a short time during the Civil War when the bonds of the United States offered very attractive returns due to the high premium for gold. Following the reports through the decades, real estate loans have steadily decreased in comparison with the increase in assets until at the present time there is less than twenty-five per cent of the invested assets in this class of securities.

The reason for the sharp decline in mortgage loans is not hard to explain. Mortgages run for short periods of time, and with the great amount of capital which the companies now control, it would prove a huge task for the investment department to look after so large a proportion as was the case when the assets were of much

smaller amounts. Then, too, real estate loans require careful examination. Fire insurance must be kept up to the loan value, titles must be examined by attorneys, and foreclosures are frequent and at times costly. In the years 1874 to 1877 real estate values in New York City suffered a decline which compelled the New York companies, who were restricted to loans in that state, to foreclose on property that could not be sold for fifty per cent of its former value, the established loan rate at the time the companies made their investments.

Students of the question regarding the investments of insurance companies generally concede that real estate loans are desirable securities, but have certain drawbacks which preclude the investment department from becoming heavily interested; the most important being as follows:

1. Mortgage loans have short time to run.
2. They are usually for small amounts.
3. Titles must be examined, requiring time and expense.
4. Insurance policies must be kept in force, also requiring time and expense.
5. The important convertible feature is lacking.

The companies had been gradually increasing their line of public securities and with the decline in mortgage loans their popularity assumed large proportions. In 1880 nearly twenty-five per cent of the assets were invested in these securities, which included government, state, county and city bonds. Then followed serious trouble. The counties and cities began to repudiate their debts; nearly one hundred cities in Illinois alone tried to avoid payment, and a similar position was taken by municipalities in other states. Since that time this class of bonds has attained an enviable reputation, with the result that the interest return is too small to attract large capital. The insurance companies now hold more municipal securities than ever before, but the amount is diminishing in relative proportion to total assets.

In 1860 corporation bonds formed about one per cent of the total assets. This percentage has fast increased and at this time nearly forty per cent of the total assets are invested in these securities.

Railroad bonds, which form the largest amount, were first considered as too great a risk to purchase. It remained for bankers

and railroad officials to educate the public before confidence was strong in these bonds. It is needless to say that they are now regarded as one of the safest forms of investment. But with this confidence comes heavy buying from the public and the result is a low interest return. The average yield on the best railroad securities is from four per cent to four and one-quarter per cent.

Bonds of electric, gas and water companies have sprung into being and have been purchased by the companies, but the total of these securities is less than five per cent of the assets.

The above resumé of investments of insurance companies brings out several points which have been uppermost in the minds of the officials whose duty it has been to invest the assets of their company. The most important of all, so vastly important that it overshadows all others, has been the ever constant effort for absolute safety of principal, combined with the greatest possible interest return. To purchase securities that were readily convertible has been another important feature.

Fifteen years ago bonds secured by mortgage on timber lands were unknown in the world of finance as investment securities. The lumber industry had formerly been composed of small units. Portable saw mills of small daily capacity operated small tracts of timber in a wasteful and expensive manner. Other industries had combined and were operated on a more economical basis. Just so the owners of mills found that larger plants must be erected to produce a good grade of lumber, and the larger the output the less the cost of operation. As a saw mill is of little value without a sufficient amount of the raw product, the next step was toward the accumulation of vast areas of standing merchantable timber.

With this evolution in business methods a demand was created for new capital. The most logical way to secure this was through the bond houses. Great fortunes had been accumulated through the natural increase in value of timber lands, by a certain class of investors in the middle west. Timber bonds first met favor with these very persons who had seen their original investment double and triple in value. Then began an educational campaign by the bond houses that had taken up this line of work. How well this work has been done may be seen by a glance at the offerings from banks and bond houses. Whereas ten years ago few, if any, of the large banks, were holders of this class of securities, almost all of these

same institutions to-day are buyers in large amounts. Practically all of the banks in the City of Chicago, Illinois, and Detroit, Michigan, together with some of the largest and most reputable bond houses, are advertising timber bonds in their regularly issued circulars.

But the purpose of this article is not to tell of the experiences of the pioneers in timber bonds, but to point out their merits and the reasons why they are suitable investments for insurance funds.

In considering the purchase of investment securities, the most important point to be decided, is the value of the property securing the loan and whether or not it can be readily sold for a sufficient amount to meet the total outstanding issue. Timber lands have a market value just the same as have farm lands, and anyone can ascertain the value of any particular tract, just as easily as he can learn the value of farm lands in any given locality. Unlike most other securities there is no depreciation in timber lands, whereas in bonds of railroad, water, gas and electric light companies it is of vital interest. The United States government, through the forestry service of the Department of Agriculture, has estimated the amount of standing timber in this country, and makes the statement that at the present rate of consumption it will be exhausted within twenty years. Instead of depreciation we, therefore, have an ever increasing value in the security back of the loan, not only through the economic principle of supply and demand, but by the natural growth of the trees.

Where the timber is being cut and removed from the land the bonds mature serially. A sinking fund is also established, which provides for a deposit with the trustee of a certain amount for each thousand feet of timber, this sum to be used to pay off the then outstanding bonds. If the loan is at the rate of say one dollar and fifty cents per thousand feet, then the sinking fund usually calls for about double that amount, or three dollars per thousand feet, so that the holders of bonds last maturing have a constantly increasing equity. As a new form of investment, the bankers underwriting these bonds have demanded a large amount of security, with the result that the average loan is for one-third the value of the mortgaged properties, and in some cases less than one-third. There is no other form of investment which has so great a proportion of security.

As additional security timber bonds generally bear the endorsement of the owners of the properties, and in many instances these individuals are worth more than the total issue.

One of the objections advanced by investors to whom offerings of timber bonds have been submitted, is the fear of fire which might destroy the timber, thereby reducing the value of the mortgaged property. The question of "fire hazard" has been studied carefully by experts on this subject. In certain localities fires are practically, if not altogether, unknown. Standing timber situated in the "fog belt" of the Pacific northwest, the redwoods of California, the pine and hardwoods of the southern states, are immune from any serious damage by fire. A "wildcat" mining scheme would receive as much consideration from a reputable banking house as would a bond issue secured by timber located in the fire region. All of the insurable property, such as mills and equipment, are covered by insurance policies and deposited with the trustee.

If the company is a going concern, its past record of earnings should be carefully examined. The financial standing of the owners, the experience and ability of the management, are all matters of importance that should be investigated.

That this type of loan has a ready market needs qualification. The issues are generally in too small amounts to be listed on the exchanges; therefore, the buyer must look to the banking house from whom he bought. Its attitude in regard to repurchasing its securities should be given careful consideration. Good banking houses understand that their success lies in the confidence which is bestowed upon them by their clients, and are always willing to buy back such bonds as are offered, at a slight discount.

In summing up the question of investments for insurance companies, we have seen that real estate loans are desirable from the standpoint of safety and income, but are in amounts too small to attract large capital, have a short time to run, time and expense are required in the examination of titles, insurance must be kept in force, and the convertible feature is lacking. We have also seen that municipal bonds are safe, but like railroad and other public service corporation securities, they yield a low interest return, due to the fact that their merits have been long advertised to the public with a consequent large demand from that source.

Timber bonds are in their very nature real estate loans, but

the objectionable features are eliminated. Good sized amounts may be had, approving legal opinions covering titles are furnished, insurance is looked after by the trustee, a fairly ready market, and an interest return of six per cent.

It is not the intention of this article to contend that insurance companies should invest a large portion of their assets in timber bonds. What is contended for is that the investment departments should investigate the merits of this type of loan which is yet in its infancy. Other classes of investment securities, such as municipal, railroad and corporation bonds, when first introduced, bore high rates of interest, and just so sure will timber bonds be issued at lower rates when their merits are thoroughly understood by the investing public.

WASTE MATERIAL AS A SOURCE OF PROFIT AND ADDED SECURITY ON TIMBER BONDS

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There are many woodenware articles which may be profitably manufactured from saw-mill waste, but the consideration of that portion of the problem belongs properly to the lumberman and is now receiving adequate attention at his hands. One company in Michigan is to-day producing a very superior grade of cattle food from their sawdust.

We will here discuss a more recent development of the industry, namely, the production of chemicals by the distillation of waste timber. Some of the articles produced are wood alcohol, turpentine, acetate of lime, acetate of soda, acetate of iron, tar, tar oil and charcoal. There is in addition to these a large number of finer products which may be obtained by a second distillation in refining plants, but such a heavy expenditure is needed to install the necessary apparatus for this second refining that it is not considered advisable in any but the very biggest operations, or where several plants in a district combine in order to get the largest possible profit from the chemical by-products.

The past history of lumber operations in America shows such shameful waste and wanton destruction of raw materials that the idea of utilizing this waste and converting it into a definite source of profit seems almost revolutionary. Yet no more remunerative field for investigation and experiment can be found in the whole timber industry and no branch of the business offers so wide a range for improvement as the utilization of waste material, and certainly there is none that will develop such sure and increasing profits.

The lumber market is subject to constant fluctuation, but most of the products obtained from the waste materials show a steady increase in both consumption and prices. Only one of these products, namely, turpentine, need be quoted at this time to prove the truth of this assertion. The trade quotations on turpentine f. o. b. Savannah, for the last week in April, show the following averages:

In 1908, 43.42 cents. In 1909, 36.83 cents. In 1910, 59.43 cents. In 1911, 74.25 cents.

As far back as 1905, the *Technical Quarterly*, speaking of this product, made the following statement:

"The life of the industry is limited to a few decades unless greater economy is practiced by the individual producer. Within the last three years the price of rosin has doubled, while the price of turpentine has steadily advanced. At the present rate of increase the next five years will see the prices of both double again."

On this item it is at once apparent that, with the rapid increase in consumption and the steady decrease in the standing timber capable of producing turpentine, there is no possible market condition that can so reduce the selling price as to make its manufacture unprofitable. The improvement in processes made during the past ten years has placed the turpentine business on such a stable basis that it is now proper to forecast it as a source of profit in all new operations and as an added security for the issuance of bonds on timber properties properly located and operated.

The familiar refuse burner in most operations may be regarded as a relic of a former state, so much so that it should be considered an evidence of improper equipment and a lack of progressive management. The "burning slab pile" as a cause of saw mill conflagration should be relegated to the tomb of primitive methods.

Within the compass of this brief article it would be difficult to lay down fixed rules on which to base an estimate of profits to be derived from the utilization of waste materials. Owing to the many different classes of timber and the varying market conditions, according to the location of the properties, we find that each operation presents distinctive problems. We will, therefore, confine ourselves to general terms and hope that this paper will lead to a more particular discussion of the topic.

Without going into cost comparisons of the methods of producing chemicals, we may say that there are three general systems: Distillation by steam, destructive distillation by the retort method, and destructive distillation by the kiln method.

The steam distillation process has been tried with varying success in different southern enterprises, and its exponents claim a uniformity of product with economical operation. In this operation the slabs are passed through chipping or grinding machines called

"hogs," and then conveyed into retorts fed with steam. In these retorts the turpentine and other volatile oils are extracted, after which the chips are converted into a superior quality of strawboard and packing papers.

The operation of destructive distillation plants is applicable to a much larger class of properties and should be given very careful consideration by every saw mill owner. Distillation not only affords an easy means of disposing of saw mill waste, but is a large profit producer. The time is rapidly approaching when, instead of being a side issue, the chemical product department will be the main business of many companies by which the production of lumber will be a minor factor.

This statement may seem incredible, but it is easily susceptible of proof. As an example, take a mill sawing seventy-five thousand feet of hardwood per day under fair conditions as to location and market. The owners consider a net profit of three dollars per thousand feet a very nice return, and one which would satisfy almost any timber operator. If the slabs from this mill are mixed with the tree tops and large limbs, it will be found that there will be an average daily output of seventy-five cords of chemical producing cordwood. With very ordinary economy in a chemical plant a net profit of ten dollars per cord may be obtained, or over three times the average net profit from the lumber department of the operation. For several years past the United States government reports show that the value of the chemicals produced exceed twenty dollars per cord of wood. These government figures are very conservative. The net profit to be derived is modified by the efficiency of the apparatus and the economies resulting from careful management.

Particular attention must be paid to the fact that the installation of a chemical plant will not interfere with saw mills as now operated. The sawdust and small refuse can still be used in the boiler plant for generation of steam. All our distillation estimates are based on the use of slabs and brush that are now absolutely lost to a great majority of timber operators.

Another element entering into the matter that is worthy of consideration is the possibility of minimizing the hazard from forest fires. Two operations in northern Michigan are fine examples of this point. Both properties are of the ordinary type of mixed timber, carrying on their lumbering operations winter and summer. When

any certain tract of timber is chosen for cutting, the start is made on one side and everything is cleared off the ground. The saw logs are shipped out to the mill. The tree tops, large limbs and small trees are cut into cordwood and piled along the logging railroad ready for shipment to the chemical plant as soon as properly seasoned. The brush is piled into heaps to be burned as soon as dry. This method of operating leaves the land cleared and effectively prevents forest fires coming in from other districts.

This system is one that should commend itself to any timber operator. If he uses high wheel trucks in his logging there is no obstacle to driving in every direction, and if he uses the cable haulage system in handling the logs, the conditions will be almost ideal. But this method of lumbering will appeal particularly to the buyer of timber bonds, as the security behind the bond issue is largely enhanced by totally eliminating the fire risk.

Where the waste timber is thus utilized there is a great advantage derived by the land being left cleared ready for the stump puller and settler. In the past the cutover lands have sold at from two to four dollars per acre. Under these newer methods the same lands find ready sale at from ten to twenty dollars per acre. In the operation of pine properties this latter point is very important, as it has been found that even the stumps are valuable. In fact, the stumps contain more turpentine than any other part of the tree. So that, where the operation receives its fullest and best development through utilizing the stumps in the distilling plant, the lands are left ready for the plow. Settlers in southern Michigan, who bought lands that were cut over twenty or thirty years ago, are selling the old pine stumps to the turpentine companies for enough to almost pay the cost of clearing their lands. In this same district some of the turpentine companies have bought large acres of cutover land, and after working up the old pine stumps in the distilleries at a handsome profit, are selling the land at largely increased prices.

The southern lumberman should be particularly interested in these newer and improved processes. After years of experiment it is now possible to manufacture in the modern wood distillation plant a grade of turpentine that is absolutely water white and free from all taint or odor of creosote. This can be done in one continuous operation and at the same time a very fine grade of gray acetate is made. If the plan is adopted in its entirety, it will be possible to

use the same machinery in pulling and loading the stumps that is now used in handling the logs alone. It will thus be possible for the lumberman to enter a virgin pine forest and clear it ready for the plow at one operation.

To sum up, we will catalogue the main points of advantage that arise in connection with modern wood distillation:

1. These processes, with slight modifications, are applicable to all classes of timber in any location.
2. The cost of installation ranges from one thousand to two thousand dollars per daily cord capacity, according to the class of timber used and the range of products required.
3. The average operation will produce one cord of wood for every thousand feet of lumber sawed.
4. As a distinct and separate business, with proper equipment, the chemical plant, after making liberal allowances for repairs and depreciation, will pay twenty per cent and upward on the capital invested.
5. A large reduction in fire hazard of both mill and timber lands.
6. Great increase in the value of cutover lands.
7. The large resulting increase in earning capacity of timber land improves the bondholder's security and facilitates the accumulation of increased sinking funds without hardship.

Even a very superficial examination of this subject will impress its importance upon any timber operator or purchaser of timber securities, as there is no one improvement in any other class of commercial activity that has taken such strides in the past decade.

Operating conditions vary so much in different districts that it is not possible to lay down any general rule by which to forecast the earnings, but no problem in wood distillation can be presented that cannot be solved by a competent expert. Certainly no new lumber enterprise of any magnitude should be organized without this feature of it receiving very careful consideration.

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